# U.S. Department of Energy Office of Transportation Technologies

# Heavy Vehicle and Engine Resource Guide





















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## http://www.afdc.doe.gov/pdfs/hvrg.pdf

For more information about Heavy Duty Vehicles visit the Alternative Fuel Vehicle Fleet Buyer's Guide

http://www.fleets.doe.gov/

or call the National Alternative Fuels Hotline

Phone: 800-423-1D0E

Local/International: 703-934-3069

Fax: 703-934-3183

E-mail: hotline@afdc.nrel.gov

For additional information contact the National Alternative Fuels Hotline.

## About This Guide

Resource Guide, a comprehensive product catalog of mediumand heavy-duty engines and vehicles with alternative fuel and advanced powertrain options.

The information included in this guide was collected by the National Renewable Energy Laboratory to provide fleet operators, policymakers, alternative fuel industry participants, and other interested parties with an overview of heavy vehicle and engine products currently available in the United States.

Beside product information, the guide also includes:

- contact information for vehicle and engine manufacturers as well as organizations and government agencies involved in the alternative fuel and advanced vehicle and engine market,
- a glossary of commonly used alternative fuel and advanced vehicle and engine terms and acronyms and
- a chart with applicable vehicle and engine emission certification specifications.

Product information in the guide is divided into three categories: Alternative Fuel Medium & Heavy Engines, Natural Gas & Propane Medium & Heavy Vehicles, and Hybrid-Electric, Battery-Electric & Fuel-Cell Heavy Vehicles.

Product information was furnished by original equipment manufacturers. Respondents were asked to provide accurate, up-to-date information about all their heavy vehicle and engine products. All information in the guide is subject to change. Please visit manufacturer Web sites for the most up-to-date

auxiliary power unit

brake horsepower

APU

bhp

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product information.

lb. or lbs.

Best efforts were made to collect information from all manufacturers offering commercially available medium and heavy vehicles and engines with alternative fuel and advanced technology options, and to collect information on all their alternative fuel products. However, some manufacturers and products may not appear in the guide.

Our thanks go out to all manufacturers whose products appear in the guide for their cooperation. We hope you find the information useful and refer to it often!

liter

pounds

# A Glossary of Abbreviations

niih	brake norsepower	ID. OI IDS.	Pounds
CARB	California Air Resources Board	LEV	low-emission vehicle
CFF	clean fuel fleet	LNG	liquefied natural gas
CI	cubic inch or compression ignition	LPG	liquefied petroleum gas
CFFP	Clean Fuel Fleet Program	MD	medium-duty
CNG	compressed natural gas	mph	miles per hour
CO	carbon monoxide	MSRP	manufacturer's suggested retail price
DGE	diesel gallon equivalent	MY	model year
<b>EPA</b>	<b>Environmental Protection Agency</b>	N/A or NA	not available or not applicable
EV	electric vehicle	NMHC	nonmethane hydrocarbons
ftlb. or lbft.	foot-pound (pound-foot)	NO <sub>x</sub>	oxides of nitrogen
gal	gallons	OEM	original equipment manufacturer
g/bhp-hr	grams per brake-horsepower hour	PM	particulate matter
GVW	gross vehicle weight	rpm	revolutions per minute
НСНО	formaldehyde	scf	standard cubic feet
HD	heavy-duty	SI	spark ignition
HEV	hybrid-electric vehicle	SULEV	super ultra low-emission vehicle
ILEV	inherently low-emission vehicle	THC	total hydrocarbons
in	inches	ULEV	ultra low-emission vehicle
in <sup>3</sup>	cubic inches	v	volts
kW-hr	kilowatts hours	ZEV	zero-emission vehicle

#### **ENGINE / VEHICLE EMISSION STANDARDS FOR THE UNITED STATES\*** Regulating agency Effective MY NMHC (g/bhp-hr) CO (g/bhp-hr) PM (g/bhp-hr) NOx (g/bhp-hr) Applicable vehicle/engine classification CARB LEV Medium-duty vehicles/engines, 8,501 to 14,000 lb. GVW <sup>J</sup> 0.33/0.43 8.1/10.3 1992-2001 0.12/0.12 1.0/1.5 CARB ULEV 1992-2003 Medium-duty vehicles/engines, 8,501 to 14,000 lb. GVW <sup>J</sup> 0.197/0.257 8.1/10.3 0.06/0.06 1.0/1.5 CARB SULEV Medium-duty vehicles/engines, 8,501 to 14,000 lb. GVW <sup>J</sup> 1992 and later 0.1/0.13 4.1/5.2 0.06/0.06 0.5/0.7 CARB LEV E 1992-2001 Engines for incomplete MD vehicles, 8,501-14,000 GVW 3.5 NMHC + NOx 14.4 0.1 3.5 NMHC + NOx CARB ULEV E 14.4 1992-2003 Engines for incomplete MD vehicles, 8,501-14,000 GVW 2.5 NMHC + NOx 0.1 2.5 NMHC + NOx CARB SULEV E 2.0 NMHC + NOx 7.2 2.0 NMHC + NOx 1992 and later Engines for incomplete MD vehicles, 8,501-14,000 GVW 0.05 CARB 1994 and later Heavy-duty diesel engines/vehicles (except urban transit buses) 1.2<sup>c</sup> 15.5 0.1<sup>F</sup> 5 CARB 1996 and later Heavy-duty diesel engines/vehicles (except urban transit buses)<sup>G</sup> 1.2-1.3 15.5 0.1 5 U.S. EPA 1998 and later Heavy-duty diesel eng./vehic. over 8.500 lb. GVW (comp. ignit./urban buses) 2.5 NMHC + NOx 15.5 $0.1/0.05^{A}$ 4 HD diesel engines/vehicles 8,501-14,000 lb. GVW (spark-ignition/Otto cycle) U.S. EPA 4.0<sup>B</sup> 1998 and later 0.9 14.4 NA U.S. EPA HD diesel engines/vehicles over 14,000 lb. GVW (spark-ignition/Otto cycle) 37.1 4.0<sup>B</sup> 1998 and later NA 1.7 U.S. EPA CFFP LEV Heavy-duty SI and CI engines over 8,500 lb. 3.8 NMHC + NOx (Fed. fuel)<sup>M</sup> 15.5 0.1 3.8 NMHC + NOx 1998 and later U.S. EPA CFFP ILEV 1998 and later Heavy-duty SI and CI engines over 8,500 lb. 2.5 NMHC + NOxK 14.4 0.1 2.5 NMHC + NOx Heavy-duty SI and CI engines over 8,500 lb. 2.5 NMHC + NOxL 7.2 2.5 NMHC + NOx U.S. EPA CFFP ULEV 1998 and later 0.05 U.S. EPA CFFP ZEV 1998 and later Heavy-duty SI and CI engines over 8,500 lb. 0 0 0 0 CARB 1.2 15.5 0.1 4 1998 and later Heavy-duty engines/vehicles (except urban buses) CARB 2000 and later Urban transit buses (fleets choosing diesel path) 1.2 15.5 0.05 4 CARB 2000 and later Urban transit buses (fleets choosing alt. fuels path) 1.2 15.5 0.05 2.5 (optional) CARB LEV E 2002-2003 Engines for incomplete MD vehicles, 8,501-14,000 GVW 3.0 NMHC + NOx 3.0 NMHC + NOx 144 0.1 CARB 2.5 NOx + NMHC 2.5 NOx + NMHC 2002 and later Urban transit buses (fleets choosing diesel path) 15.5 0.05 4.8 NOx fleet ave. 4.8 NOx fleet ave. CARB 1.8 NOx + NMHC (opt.) 1.8 NOx + NMHC (opt.) 2002 and later Urban transit buses (fleets choosing alternative fuels path) 15.5 0.03 4.8 NOx fleet ave. 4.8 NOx fleet ave. CARB 0.03 to 0.01 1.8 to 0.3 NMHC + NOx 2002 and later<sup>D</sup> Heavy-duty engines/vehicles over 14,000 lb. GVW (except urban buses) 1.8 to 0.3 NMHC + NOx 15.5 2.4-2.5 NOx + NMHC CARB 2004 and later Heavy-duty engines/vehicles (except urban buses)H,1 2.4-2.5 NOx + NMHC 15.5 0.1 CARB 2004 and later Urban transit buses (fleets choosing diesel path) NA 15.5 0.01 0.5 CARB ULEV Opt. A E 2004 and later Engines for incomplete MD vehicles, 8,501-14,000 GVW 2.5 NMHC + NOx 14.4 0.1 2.5 NMHC + NOx CARB ULEV Opt. B E 2004 and later Engines for incomplete MD vehicles, 8,501-14,000 GVW 2.4 NMHC + NOx 14.4 0.1 2.4 NMHC + NOx CARB 2004-2006 New diesel-fueled, dual-fuel, or bifuel HD engines in urban transit buses 0.05 5.0/7.0 0.01 0.5 U.S. EPA CFF 2004 and later Heavy-duty diesel engines for vehicles over 8.500 lb. 2.4 HC + NOx 15.5 $0.1/0.05^{A}$ 2.4 HC + NOx U.S. EPA CFF Heavy-duty gasoline engines, GVW 8,501-10,000 lb. 0.9 a/mile 2005 and later 0.28 a/mile NA NA U.S. EPA CFF 0.33 g/mile NA NA 1.0 g/mile 2005 and later Heavy-duty gasoline engines, GVW 10,001-14,000 lb. CARB 2007 and later Urban transit buses (fleets choosing diesel path) NA NA 0.01 0.2 CARB NA NA 0.2 2007 and later Urban transit buses (fleets choosing alt. fuels path) 0.01 U.S. EPA 2007 and later Heavy-duty diesel engines/vehicles 0.14 15.5 0.01 0.2 U.S. EPA 0.20 2008 and later Heavy-duty Otto-cycle engines/vehicles 0.14 14.4 0.01 U.S. EPA 0.2 a/mile 2008 and later Complete heavy-duty vehicles, GVW 8.501-10.000 lb. 0.195 a/mile 7.3 a/mile 0.02 a/mile U.S. EPA 2008 and later Complete heavy-duty vehicles, GVW 10,001-14,000 lb. 0.23 g/mile 8.1 g/mile 0.02 g/mile 0.4 g/mile

K. HCHO standard of 0.5 g/bhp-hr

L. HCHO standard of 0.25 g/bhp-hr

M. Standard for CARB fuel is 3.5 g/bhp-hr NMHC + NOx

\*For more detailed information, visit the EPA Office of Transportation and Air Quality Web site at www.epa.gov/otaq or the CARB Web site at www.arb.ca.gov

- A. Standard for urban buses, MY 1996 and later
- B. NOx standard for all natural gas-fueled engines is 5.0
- C. NMHC standard applies to petroleum-, natural gas, and propane-powered engines
- D. Optional standards effective 10/2002
- E. Optional standards
- F. PM standard for urban transit buses is 0.07 g/bhp-hr under transient operating conditions
- G. For urban transit buses, NOx standard is 4.0 g/bhp-hr and PM standard is 0.05-0.07 g/bhp-hr
- H. Standards apply to engines fueled with petroleum-based fuel, natural gas, or propane
- I. Vehicles (other than urban transit buses) over 14,000 lb. GVW may also be certified to optional standards of 0.3-1.8 g/bhp-hr NOx and 0.01-0.03 g/bhp-hr PM
- J. First standard listed for each pollutant is for engines/vehicles 8,501 to 10,000 lb. GVW; second standard listed is for engines/vehicles 10,001 to 14,000 lb. GVW

# Information Sources for Heavy Vehicles & Engines

## Trade associations, R&D groups, government agencies, advocacy groups, etc.

Alternative Fuels Data Center & Hotline

U.S. Depart. of Energy

Phone: 800-423-1363/703-934-3069

Web site: www.afdc.doe.gov

**American Bioenergy Association** 

314 Massachusetts Ave. NE, Suite 200,

Washington, DC 20002

**Megan Smith** 

Phone: 202-467-6540 Fax: 202-467-6541

Web site: www.biomass.org

**American Bus Association** 

1100 New York Ave. NW, Suite 1050,

Washington, DC 20005-3934

**William Mahoney** 

Phone: 202-842-1645 Fax: 202-842-0850

Web site: www.buses.org

**American Public Transportation Association** 

1666 K St. NW.

Washington, DC 20006

**Rose Gandee** 

Phone: 202-496-4889 Fax: 202-496-4324 Web site: www.apta.com

**American Trucking Associations** 

2200 Mill Rd..

Alexandria, VA 22314-4677

Susan Coughlin

Phone: 703-838-1700 Fax: 703-838-0291

Web site: www.truckline.com

California Air Resources Board (CARB), Mobile Source

**Operations Division** 

PO Box 8001,

El Monte, CA 91734-2301

**Allen Lyons** 

Phone: 626-450-6150 Web site: www.arb.ca.gov **California Electric Transportation Coalition** 

925 L St., Suite 1490, Sacramento, CA 95814

**David Modisette, Executive Director** 

Phone: 916-552-7077 Fax: 916-552-7075

**California Energy Commission** 

1516 9th St., MS-41,

Sacramento, CA 95814-2950

Transportation Technology/Fuels Dept.

Phone: 916-654-4634 Fax: 916-653-4470

Web site: www.energy.ca.gov

CALSTART/WESTART Advanced Vehicle Consortium

3360 E. Foothill Blvd., Pasadena, CA 91107

Susan Romeo

Phone: 626-744-5600 Fax: 626-744-5610

Web site: www.calstart.org

Clean Cities Program, U.S. Dept. of Energy

1000 Independence Ave. SW, EE-34,

Washington, DC 20585

**Shelley Launey, Program Director** 

Phone: 800-224-8437/202-586-1573

Fax: 703-586-1600

Web site: www.ccities.doe.gov

**Electric Transit Vehicle Institute** 

1617-B Wilcox Blvd., Chattanooga, TN 37404

**John Powell** 

Phone: 423-622-3884 Fax: 423-622-0744 Web site: www.etvi.org

Electric Vehicle Association of the Americas

701 Pennsylvania Ave. NW, 4th Floor,

Washington, DC 20004

Kateri Callahan. Executive Director

Phone: 202-508-5995 Fax: 202-508-5924 Web site: www.evaa.org

## Information Sources for Heavy Vehicles & Engines - cont'd

**Engine Manufacturers Association** 

Two N. LaSalle St., Suite 2200,

Chicago, IL 60602

Joe Cipolletti, executive director

Phone: 312-827-8733 Fax: 312-827-8737

Web site: www.engine-manufacturers.org

Federal Transit Administration (U.S.)

400 7th St. SW, TRI-20, Washington, DC 20590

William Siegel, Director, Office of Technology

Phone: 202-366-0942 Fax: 202-366-3765

Web site: www.fta.dot.gov/research/equip

**Gas Technology Institute** 

1700 South Mt. Prospect Rd.,

Des Plaines, IL 60018

William E. Liss

Phone: 847-768-0753 Fax: 847-768-0501 Web site: www.gri.org

International Association for Natural Gas Vehicles

(New Zealand) PO Box 28-590.

Auckland, New Zealand

Dr. Garth Harris, Secretary General

Phone: 64-9-524-0945 Fax: 64-9-520-3122 Web site: www.iangv.org

**National Alternative Fuels Training Consortium** 

1460 Earl Core Rd., Morgantown, WV 26506 Bill McGlinchey

Phone: 304-293-7882 Fax: 304-293-6944

Web site: http://naftp.nrcce.wvu.edu

**National Biodiesel Board** 

3337A Emerald Lane,

Jefferson City, MO 65110-4898 Joe Jobe, executive director

Phone: 573-635-3893 Fax: 573-635-7913 Web site: www.nbb.org **National Propane Gas Association** 

1600 Eisenhower Lane, Suite 100,

Lisle, IL 60532-2167

Sue Spear, Director of Education & Safety Activities

Phone: 630-515-0600 Fax: 630-515-8774 Web site: www.npga.org

**National Renewable Energy Laboratory (NREL)** 

**1617 Cole Blvd.**,

Golden, CO 80401-3393

**Kevin Walkowicz** 

Phone: 303-275-3607 Fax: 303-275-4415 Web site: www.nrel.gov

**Natural Gas Vehicle Coalition** 

1100 Wilson Blvd., Suite 850,

Arlington, VA 22209

Richard Kolodziej, President

Phone: 703-527-3022 Fax: 703-527-3025 Web site: www.ngvc.org

**Propane Education & Research Council** 

1776 K St. NW, Suite 204, Washington, DC 20006 **Roy Willis, President** Phone: 202-452-8975

Phone: 202-452-897 Fax: 202-452-9054

Web site: www.propanecouncil.org

**Propane Vehicle Council** 

1155 Connecticut Ave NW, Suite 300,

Washington, DC 20036

Joe Coleneri, Executive Director

Phone: 202-530-0479 Fax: 202-429-0977

Web site: www.propanegas.com/vehicle

U.S. Dept. of Energy Office of Transportation

Technologies

1000 Independence Ave. SW, EE-33,

Washington, DC 20585

**Steve Goguen** 

Phone: 202-586-8044 Web site: www.ott.doe.gov

## Information Sources for Heavy Vehicles & Engines - cont'd

U.S. Environmental Protection Agency Office of Transportation and Air Quality 1200 Pennsylvania Ave NW, 6401A,

Washington, DC 20460

Margo T. Oge

Phone: 202-564-1682 Fax: 202-564-1686

Web site: www.epa.gov/otaq

**U.S. Fuel Cell Council** 

1625 K St. NW, Suite 725, Washington, DC 20006

**Bob Rose** 

Phone: 202-293-5500 Fax: 202-785-4313

Web site: www.usfcc.com

# Vehicle & Engine Manufacturer Contact Information

#### **Advanced Vehicle Systems Inc.**

**Kirk Shore** 

Phone: 423-821-3146 Fax: 423-821-0042

Web site: www.avsbus.com

#### **Alternative Fuel Technology Robert Lynch**

Phone: 972-392-1949 Fax: 972-661-1776

Web site: www.cleanair1.com

#### Arrow Specialty Co.

**Kavas Mistry** 

Phone: 800-331-3662 Fax: 918-592-1481

Web site: www.arrowspecialty.com

#### Blue Bird Corp. Rusty Mitchell

Phone: 478-822-2262 Fax: 478-822-2466

Web site: www.blue-bird.com

#### **Capstone Turbine Corp.**

**Keith Field** 

Phone: 818-734-5465 Fax: 818-734-5320

Web site: www.microturbine.com

## Caterpillar/Power Systems Associates

**Ray Hartwell** 

Phone: 309-578-3550 Fax: 309-578-6466

Web site: www.caterpillar.com

#### Champion Bus Inc. Paul Allmacher

Phone: 800-776-4943 Fax: 810-724-1844

Web site: www.championbus.com

#### **Chance Coach Inc.**

**Fred Gilliam** 

Phone: 316-838-1211 Fax: 316-779-7727

Web site: www.chancecoach.com

#### Crane Carrier Co. Richard Hugger

Phone: 918-836-1651 Fax: 918-832-7343

Web site: www.cranecarrier.com

#### **Cummins Westport Inc.**

**Scott Davidson** 

Phone: 812-377-1734 Fax: 812-377-3082

Web site: www.cummins.com or www.westport.com

#### **Deere Power Systems Group**

Glen Crusciel

Phone: 319-292-5465 Fax: 319-292-5075 Web site: www.deere.com

#### **Detroit Diesel Corp.**

John Craft

Phone: 313-592-5000 Fax: 313-592-8176

Web site: www.detroitdiesel.com

#### ElDorado National

**Gentry Shaw** 

Phone: 909-591-9557 Fax: 909-591-5285

Web site: www.lasseter.com/eldorado.htm

#### **Electric Vehicles International**

**Paul Johnson** 

Phone: 800-618-3722 Fax: 765-643-3726

Web site: www.evi-usa.com

#### Elgin Sweeper Co.

**Brian Giles** 

Phone: 847-741-5370 Fax: 847-742-3035

Web site: www.elginsweeper.com

#### Freightliner Custom Chassis Corp.

**Bryan Henke** 

Phone: 864-487-1700 Fax: 864-487-6400

Web site: www.freightlinerchassis.com

## Freightliner Trucks

**Keith Harrington** Phone: 503-745-8136

Fax: 503-735-6827

Web site: www.freightliner.com

#### Ford Motor Co.

**Shannon Gibson** 

Phone: 888-360-3907 Fax: 313-336-3094

Web site: www.fleet.ford.com

## Vehicle & Engine Manufacturer Contact Information - cont'd

ISE Research Corp. George Schuh

Phone: 619-287-8785, ext. 129

Fax: 619-287-8795

Web site: www.iseresearch.com

Jasper Engines & Transmissions Calvin Thorn

Phone: 800-827-7455 Fax: 812-634-1820

Web site: www.jasperengines.com

Mack Trucks Inc. Stephen Ginter

Phone: 610-709-3259 Fax: 610-709-2380

Web site: www.macktrucks.com

Magnum Terminal Tractors/Kalmar Industries

Ron Gage

Phone: 800-982-1527 or 903-759-5490

Fax: 903-297-8166

Web site: www.magnumterminaltractor.com

Motive Power Industries, a Wabtec Co.

**Dennis Nott** 

Phone: 208-947-3022 Fax: 208-947-3040

Web site: www.wabtec.com

**Motor Coach Industries** 

John Andrews

Phone: 800-428-7626 or 847-299-9900

Fax: 847-299-7843

Web site: www.mcicoach.com

Neoplan USA Corp. Joyce D. Surprise

Phone: 719-336-3256 Fax: 719-336-4201

Web site: www.neoplanusa.com

New Flyer of America Philippe Bellon

Phone: 204-224-1251 Fax: 204-224-4214

Web site: www.newflyer.com

**North American Bus Industries** 

Richard Himes

Phone: 805-529-5080 Fax: 805-529-3858

Web site: www.nabiusa.com

Nova Bus Corp. Joseph R. Gibson

Phone: 450-974-0111 Fax: 972-870-4497

Web site: www.novabuses.com

OmniTrans Jim Maroney

Phone: 405-840-2622 Fax: 405-840-3969

Web site: www.cngvehicle.com

**Orion Bus Industries** 

**Paul Royal** 

Phone: 905-403-1111 Fax: 905-403-8808

Peterbilt Motors Co.

**Eric Hansen** 

Phone: 940-591-4277 Fax: 940-591-4091

Web site: www.peterbilt.com

Solectria Corp.
Doug Alderton

Phone: 978-658-2231 Fax: 978-658-3224

Web site: www.solectria.com

Spartan Motors Chassis Inc. Edward Hendler

Phone: 517-543-6400 Fax: 517-543-7728

Web site: www.spartanmotors.com

Supreme Corp./Specialty Vehicles Inc.

Dale DeLine

Phone: 714-848-8455 Fax: 714-848-2114

Web site: www.specialtyvehicles.com

Thomas Built Buses

**Ron Dillard** 

Phone: 336-841-5725 Fax: 336-841-5734

Web site: www.thomasbus.com

TransTeq Dale Hill

Phone: 303-382-1041 Fax: 303-297-3990

Web site: www.transteq.com

## Vehicle & Engine Manufacturer Contact Information - cont'd

TYMCO Inc.

**Bobby L. Johnson** Phone: 800-258-9626 Fax: 254-799-2722

Web site: www.tymco.com

**Volvo Trucks North America** 

Rick Beavan

Phone: 336-393-2779 Fax: 336-393-2197

Web site: www.volvotrucks.com

**XCELLSIS Inc.** 

**Bruce Rothwell** 

Phone: 604-432-9200 Fax: 604-419-6400

Web site: www.xcellsis.com

## Alternative Fuel Medium & Heavy Engines

## Alternative Fuel Technology

Web site: http://www.cleanair1.com

Phone: 972-392-1949 Dealer locator Web site: N/A Dealer locator phone: N/A

H/D DT466 Natural Gas

Fuel type: CNG; LNG **Displacement:** 7.6 liter Rated horsepower: 250 hp Peak torque: 640 ft.-lb.

**Emission certification(s):** CARB Low NOx

(2.0); EPA Heavy-Duty; EPA LEV **Emission control device?** Yes **Number of Cylinders:** 6 Dry weight: 2,200 lb.

**Application(s):** Truck; transit bus; school bus;

trolley; shuttle; offroad

Model description: Spark-ignited, dedicated closed-loop, stoichiometric, electronic-controlled.

tamper-proof.

Warranty information: 10-yr./300,000-mi.

Caterpillar

Web site: http://www.caterpillar.com

Phone: 309-675-1000

Dealer locator Web site: http://www.caterpillar.com/dealers

Dealer locator phone: N/A

C-10 Dual-Fuel Fuel type: CNG; LNG

**Displacement:** 10 liter Rated horsepower: 305 hp Peak torque: 1050 ft.-lb.

Emission certification(s): EPA LEV; CARB Low

NOx (2.5)

**Emission control device?** No Number of cylinders: 6 Dry weight: 2100 lb.

**Application(s):** Offroad; transit bus; truck

**Model description:** Similar performance to diesel; clean emissions; compatible with compression brake installation; full electronic operation; diesel resale value at trade time; attractive operating economies depending on

location, mileage.

Warranty information: Same as standard

diesel.

C-12 Dual-Fuel

Fuel types: CNG, LNG **Displacement:** 12 liter Rated horsepower: 410 hp Peak torque: 1250 ft.-lb.

**Emission certification(s):** EPA LEV;

CARB Low NOx

**Emission control device?** No **Number of Cylinders:** 6 Dry weight: 2120 lb.

**Application(s):** Truck; transit bus; offroad

**Model description:** Similar to diesel performance; clean emissions; diesel resale value

at trade time. Full electronic operation. **Warranty information:** Same as standard

diesel.

3126E Dual-Fuel 190 Fuel type: CNG; LNG

**Displacement:** 7.2 liter Rated horsepower: 190 hp Peak torque: 520 ft.-lb.

**Emission certification(s):** CARB Low NOx

(2.5): EPA LEV

**Emission control device?** No Number of cylinders: 6 Dry weight: 1347 lb.

**Application(s):** Truck; school bus; trolley;

shuttle

**Model description:** Similar performance to diesel; better fuel efficiency than spark-ignited, gas engines; clean emissions; compatible with compression brakes installation; full diesel resale value at trade time; full electronic operation. Warranty information: Same as standard diesel.

3126E Dual-Fuel 250

Fuel type: CNG; LNG **Displacement:** 7.2 liter Rated horsepower: 250 hp Peak torque: 640 ft.-lb.

**Emission certification(s):** CARB Low NOx

(2.5); EPA LEV

**Emission control device?** No Number of cylinders: 6 Dry weight: 1347 lb.

**Application(s):** Truck; school bus; trolley,

shuttle

**Model description:** Similar performance to diesel; better fuel efficiency than spark-ignited, gas engines; clean emissions; compatible with compression brakes installation; full diesel resale value at trade time; full electronic operation. Warranty information:Same as standard diesel.

Cummins Westport Inc Web site: http://www.cummins.com	Phone: 1-800-343-7357  Dealer locator Web site: http://www.cummins.com  Dealer locator phone: 1-800-343-7357	
B5.9G 150 Fuel type: CNG; LNG Displacement: 5.9 liter Rated horsepower: 150 hp Peak torque: 375 ftlb.	Emission certification(s): EPA LEV; EPA ULEV; EPA Heavy-Duty; CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 910 lb. Application(s): Truck; school bus; trolley, shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas.  Warranty information: 2 years, unlimited miles (all markets).
B5.9G 195 Fuel type: CNG; ING Displacement: 5.9 liter Rated horsepower: 195 hp Peak torque: 420 ftlb.	Emission certification(s):: EPA LEV; EPA ULEV; EPA Heavy-Duty; CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 910 lb. Application(s): Truck; school bus; trolley; shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas.  Warranty information: 2 years, unlimited miles (all markets).
B5.9G 230 Fuel type: CNG; LNG Displacement: 5.9 liter Rated horsepower: 230 hp Peak torque: 500 ftlb.	Emission certification(s): EPA LEV; EPA ULEV; EPA Heavy-Duty, CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 910 lb. Application(s): Truck; school bus; trolley, shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas.  Warranty information: 2 years, unlimited miles (all markets).
B5.9LPG Fuel type: Propane Displacement: 5.9 liter Rated horsepower: 195 hp Peak torque: 420 ftlb.	Emission certification(s): EPA LEV; EPA Heavy- Duty; CARB Low NOx (2.5) Emission control device? Yes Number of cylinders: 6 Dry weight: 910 lb. Application(s): Truck; school bus; trolley; shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on HD-5 propane.  Warranty information: 2 years, unlimited miles (all markets).
C8.3G Plus 250 Fuel type: CNG; LNG Displacement: 8.3 liter Rated horsepower: 250 hp Peak torque: 660 ftlb.	Emission certification(s): EPA LEV; EPA ULEV; EPA Heavy-Duty; CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 1330 lb. Application(s): Truck; school bus; trolley; shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas. The C8.3G is certified with a catalyst to the HD urban bus emissions standards.  Warranty information: 2 years, unlimited miles (bus); 2 years, 100,000 miles (truck).
C8.3G Plus 275 Fuel type: CNG; LNG Displacement: 8.3 liter Rated horsepower: 275 hp Peak torque: 750 ftlb.	Emission certification(s): EPA LEV; EPA ULEV; EPA Heavy-Duty; CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 1330 lb. Application(s): Truck; school bus; trolley; shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas. The C8.3G is certified with a catalyst to the HD urban bus emissions standards.  Warranty information: 2 years, unlimited miles (bus); 2 years, 100,000 miles (truck).
C8.3G Plus 280 Fuel type: CNG; LNG Displacement: 8.3 Rated horsepower: 280 hp Peak torque: 850 ftlb.	Emission certification(s): EPA LEV; EPA ULEV; EPA Heavy-Duty; CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 1330 lb. Application(s): Truck; school bus; trolley; shuttle; refuse	Model description: Lean-burn, spark-ignited, electronically controlled engine designed and certified to operate on natural gas. The C8.3G is certified with a catalyst to the HD urban bus emissions standards.  Warranty information: 2 years, unlimited miles (bus); 2 years, 100,000 miles (truck).

## Detroit Diesel Corp.

#### Web site: http://www.detroitdiesel.com

Phone: 313-592-5000

Dealer locator Web site: http://www.detroitdiesel.com

Dealer locator phone: 313-592-5000

Series 50G Fuel type: CNG; LNG

Displacement: 8.5 liter Rated horsepower: 275 hp Peak torque: 890 ft.-lb. **Emission certification(s):** EPA Heavy-Duty;

CARB Low NOx (2.0)

Emission control device? No Number of cylinders: 4 Dry weight: 2230 lb.

**Application(s):** Transit bus; truck; gen set

**Model description:** Dedicated natural gas, full elec. control, flat torque 1200-1800 rpm, coil-overplug ignition system, engine protection via knock sensor, exhaust temp. sensor.

Warranty information: 0-24 months unlimited miles; parts/labor on catalytic converter: 25-60 months/100,000 mi.; parts/labor on accessories: 0-50,000 mi.

Series 60G 330

Fuel type: CNG; LNG
Displacement: 12 liter
Rated horsepower: 330 hp
Peak torque: 1400 ft.-lb.

Emission certification(s): EPA Heavy-Duty,

CARB Low NOx (2.5)

Emission control device? No Number of cylinders: 6 Dry weight: 2660 lb.

Application(s): Transit bus; truck; gen set

**Model description:** Dedicated natural gas, full elec. control, flat torque from 1200-1800 rpm, coil-over-plug ignition system, engine protection via knock sensor, exhaust temp, sensor.

Warranty information: 0-24 months unlimited miles; parts/labor on catalytic converter: 25-60 months/100,000 mi.; parts/labor on accessories: 0-50.000 mi.

Series 60G 400

Fuel type: CNG; LNG
Displacement: 12 liter
Rated horsepower: 400 hp
Peak torque: 1450 ft.-lb.

Emission certification(s): EPA Heavy-Duty;

CARB Low NOx (2.5)

Emission control device? No Number of cylinders: 6 Dry weight: 2660 lb.

Application(s): Transit bus; truck; gen set

**Model description:** Dedic. natural gas, full elec. control, flat torque from 1200-1800 rpm, coil-overplug ignition system, engine protection via knock sensor, exhaust temp. sensor.

Warranty information: 0-24 months unlimited miles; parts/labor on catalytic converter: 25-60 months/100,000 mi.; parts/labor on accessories: 0-50.000 mi.

## Jasper Alternate Fuels

Web site: http://www.jasperengines.com

Phone: 800-827-7455
Dealer locator Web sit

Dealer locator Web site: deltapropane@citlink.net

Dealer locator phone: 916-775-1111

Jasper 460 Fuel type: Propane Displacement: 7.5 liter Rated horsepower: 110 hp Peak torque: 393 ft.-lb. **Emission certification(s):** CARB Low NOx (1.5)

Emission control device? Yes Number of cylinders: 8 Dry weight: 1000 lb. Application(s): Offroad **Model description:** Engine is equipped with Terminox-DGC digital closed-loop fuel control-flywheel, industrial bellhousing, exhaust headers, Y manifold total exhaust.

**Warranty information:** Warranted for a period of 2 years or 1,500 hours, whichever comes first.

## John Deere Power Systems

Web site: http://www.deere.com

Dealer locator phon

Phone: 319-292-5465

Dealer locator Web site: http://www.deere.com Dealer locator phone: 1-800-533-6446

6081H 250 **Fuel type:** CNG

**Displacement:** 8.1 **Rated horsepower:** 250 hp **Peak torque:** 800 ft.-lb.

Emission certification(s): EPA LEV; EPA Heavy-

Duty; CARB Low NOx (2.5) Emission control device? No Number of cylinders: 6 Dry weight: 1470 lb.

**Application(s):** Truck; transit bus; school bus;

shuttle; other

Model description: John Deere PowerTech 8.1L, 250 hp engine utilizes lean-burn, closed-loop adaptive-learn technology. The electronically controlled fuel management system provides excellent emissions control, diesel-like performance, fuel economy, and reliability while reducing maintenance costs and lowering noise levels.

Warranty information: School and activity buses: 5 years/100,000 miles, whichever occurs first, from the date of delivery to the first retail purchaser. Extended warranty is available. Commercial buses: 2 years from date of delivery to the first purchaser; no distance limit. Extended warranty available.

6081H 280 Fuel type: CNG Displacement: 8.1

Rated horsepower: 280 hp Peak torque: 900 ft.-lb. Emission certification(s): EPA LEV; EPA Heavy-

Duty, CARB Low NOx (2.0) Emission control device? Yes Number of cylinders: 6 Dry weight: 1470 lb.

**Application(s):** Truck; transit bus; school bus;

shuttle; other

Model description: John Deere PowerTech 8.1L, 280 hp engine utilizes lean-burn, closed-loop adaptive-learn technology. The electronically controlled fuel management system provides excellent emissions control, diesel-like performance, fuel economy, and reliability while reducing maintenance costs and lowering noise levels.

Warranty information: School and activity buses: 5 years/100,000 miles, whichever occurs first, from the date of delivery to the first retail purchaser. Extended warranty is available. Commercial buses: 2 years from date of delivery to the first purchaser; no distance limit. Extended warranty available.

6068H

Fuel type: CNG Displacement: 6.8

Rated horsepower: 225 hp Peak torque: 640 ft.-lb. Emission certification(s): EPA LEV; EPA Heavy-

Duty; CARB Low NOx (2.5)

Emission control device? No

Number of cylinders: 6

Dry weight: 1290 lb.

**Application(s):** Truck; transit bus; school bus;

shuttle; other

Model description: John Deere PowerTech 6.8L natural gas engine rate at 225 hp is a dedicated CNG engine that utilizes lean-burn, closed-loop, adaptive-learn technology. The electronically controlled fuel management system provides diesel-like performance, fuel economy, and reliability while reducing maintenance costs and significantly lowering noise levels.

Warranty information: School bus and activity bus: 5 years/100,000 miles, whichever occurs first from date of delivery to the first retail purchaser. Extended warranty available. Commercial bus: 2 years from date of delivery to first retail purchaser; no distance limit. Extended warranty available.

Mack Trucks, Inc.

Web site: http://www.macktrucks.com

Eco-Tech E7G 325 Fuel type: CNG; LNG Displacement: 12

Rated horsepower: 325 hp Peak torque: 650 ft.-lb. Phone: 610-709-3259

Dealer locator Web site: http://www.macktrucks.com

Dealer locator phone: N/A

Emission certification(s): CARB Low

NOx (2.0)

Emission control device? No Number of cylinders: 6 Dry weight: 2,150 lb. Application(s): Truck **Model description:** 21% torque rise. Closed-loop, lean-burn electronic engine. Inductive, direct-fire ignition, coil-on-plug design without external spark plug wires. Compression ratio of 11.5:1 with wastegate turbo for excellent fuel economy.

 $\label{lem:warranty} \textbf{Warranty information: } 2\text{-yr.}/300,000\text{-mi.} \\ warranty with 5\text{-yr.}/500,000\text{-mi. major component} \\$ 

warranty.

Eco-Tech E7G 325

Fuel type: CNG; LNG Displacement: 12

Rated horsepower: 325 hp Peak torque: 1180 ft.-lb. Emission certification(s):CARB Low

NOx (2.5)

Emission control device? No Number of cylinders: 6 Dry weight: 2150 lb. Application(s): Truck **Model description:** 35% torque rise. Closed-loop, lean-burn electronic engine. Inductive, direct-fire ignition, coil-on-plug design without external spark plug wires. Compression ratio of 11.5:1 with wastegate turbo for excellent fuel economy.

**Warranty information:** 3-yr./300,000-mi. warranty with 5-yr./500,000-mi. warranty on major components. Custom warranties available.

Eco-Tech E7G 350 Fuel type: CNG; LNG

Fuel type: CNG; LNG Displacement: 12

Rated horsepower: 350 hp Peak torque: 1250 ft.-lb. Emission certification(s): EPA Heavy-Duty;

CARB Low NOx (2.5)

Emission control device? No Number of cylinders: 6 Dry weight: 2150 lb. Application(s): Truck **Model description:** 23% torque rise. Closed-loop, lean-burn electronic engine. Inductive, direct-fire ignition, coil-on-plug design without external spark plug wires. Compression ratio of 11.5:1 with waste gate turbo for excellent fuel economy.

**Warranty information:** 3-yr./300,000-mi. warranty with 5-yr./500,000-mi. warranty on major components. Custom warranties available.

## Natural Gas & Propane Medium & Heavy Vehicles

Blue Bird Corp.

Web site: http://www.blue-bird.com

Phone: 478-822-2262

Dealer locator Web site: http://www.blue-bird.com

Dealer locator phone: N/A

CSFE Commercial Series Front-Engine Bus

**Application(s):** Transit bus; shuttle

Fuel type: LNG

Engine make(s)/model(s): Cummins 5.9G Transmission make(s)/model(s): Allison MT643; Allison B300; Allison B300 R Emission certification(s): EPA LEV MSRP with alternative fuel: \$ 90,000

Fuel capacity: N/A

Estimated driving range: N/A

GVW: 30,000 lb. Seating capacity: 49 **Model description:** Available in 25- to 37-foot lengths, with engines equipped for either LNG or

CNG.

Warranty information: N/A

CSFE Commercial Series Front-Engine Bus

Front-Engine Bus **Application(s):** Transit bus; shuttle

**Transmission type:** Automatic

Fuel type: CNG

Engine make(s)/model(s): Cummins 5.9G Transmission make(s)/model(s): Allison MT643; Allison B300; Allison B300 R Transmission type: Automatic Emission certification(s): EPA LEV MSRP with alternative fuel: \$ 90,000

Fuel capacity: N/A

Estimated driving range: N/A

**GVW:** 30,000 lb. **Seating capacity:** 49

**Model description:** Available in 25- to 37-foot lengths, with engines equipped for either LNG or

CNG

Warranty information: N/A

CSRE Commercial Series

Rear-Engine Bus Application(s): Transit bus; shuttle

Fuel type: CNG

Engine make(s)/model(s): Deere 6068H;

Deere 6081H: Cummins 5.9G

**Transmission make(s)/model(s):** Allison

AT545, MT643, B300, B300R Transmission type: Automatic **Emission certification(s):** EPA LEV; EPA ULEV;

CARB Low NOx (2.5)

MSRP with alternative fuel: \$ 150,000

Fuel capacity: N/A

Estimated driving range: N/A

GVW: N/A

Seating capacity: N/A

**Model description:** Available in 32- to 39-foot lengths. Emission certification depends on engine

make.

Warranty information: N/A

Q-Bus (QBRE)

**Application(s):** Transit bus; shuttle

Fuel type: CNG

**Engine make(s)/model(s):** Deere 6068H;

Deere 6081H; Cummins 5.9G

Transmission make/model: Allison AT545

Transmission type: Automatic

**Emission certification(s):** EPA LEV; EPA ULEV;

CARB Low NOx (2.5)

MSRP with alternative fuel: \$ 190,000

Fuel capacity: N/A

Estimated driving range: N/A

GVW: 30,000 lb. Seating capacity: 33

**Model description:** Rear-engine, 29-foot bus with custom-designed chassis and heavy-duty suspension. All-steel body construction. Emission certification depends on engine make.

Warranty information: N/A

Champion Bus Inc.

Web site: http://www.championbus.com

Phone: 800-776-4943 Dealer locator Web site: N/A

Dealer locator phone: 800-776-4943

Crusader

**Application(s):** Transit bus; shuttle; paratransit

Fuel type: CNG

Engine make(s)/model(s): Ford, GM Transmission make(s)/model(s): N/A

**Transmission type:** Automatic

**Emission certification(s):** EPA ULEV; EPA

Heavy-Duty; CARB Low NOx (1.5)

MSRP with alternative fuel: \$ 55,000

Fuel capacity: 30 DGE

Estimated driving range: 300 miles

GVW: 10,700 lb. Seating capacity: 14 **Model description:** Type 2 steel hoop-wrapped

tanks; Ford, Chevy cutaway chassis.

Warranty information: Chassis: 3-yr / 36,000-

mi.; body: 5-yr / 75,000-mi.

Emission certification(s): EPA ULEV; EPA **Model description:** Type 2 steel hoop-wrapped Challenger **Application(s):** Transit bus; shuttle; paratransit Heavy-Duty: CARB Low NOx (1.5) tanks; Ford or Chevrolet cutaway chassis. Fuel type: CNG MSRP with alternative fuel: \$ 60.000 Warranty information: Chassis: 3-vr. / 36.000-**Engine make(s)/model(s):** Ford natural gas Fuel capacity: 33 DGE mi.; body: 5-yr. / 75,000-mi. engines; GM natural gas engines Estimated driving range: 300 miles Transmission make(s)/model(s): N/A **GVW:** 14,000 lb. **Transmission type:** Automatic Seating capacity: 25 Emission certification(s): EPA Heavy-Duty; EPA Model description: Workhorse P30 rail chassis. Commodore **Application(s):** Shuttle; paratransit Warranty information: Chassis: 3-yr. / 36,000-ULEV; CARB Low NOx (1.5) **Fuel type:** Propane MSRP with alternative fuel: \$ 65,000 mi.; body: 5-yr. / 75,000-mi. Engine make(s)/model(s): GM 5.7 LPG Fuel capacity: 21 DGE Transmission make(s)/model(s): N/A Estimated driving range: 300 miles Transmission type: Automatic **GVW:** 14,100 lb. Seating capacity: 21 Emission certification(s): EPA LEV; EPA Heavy-**Model description:** N/A **Application(s):** Transit bus; shuttle; paratransit Duty; CARB Low NOx (1.5); EPA ULEV Warranty information: Chassis: 3-yr. / 36,000-**Fuel type:** Propane MSRP with alternative fuel: \$ 89,000 mi.; body: 5-yr. / 75,000-mi. **Engine make(s)/model(s):**Cummins 5.9 LPG Fuel capacity: 36 DGE Transmission makes/models: Allison AT545 **Estimated driving range:** 300 miles **Transmission type:** Automatic GVW: 19.000 lb. **Seating capacity: 37** Contender **Emission certification(s):** EPA LEV; EPA Heavy-**Model description:** N/A **Application(s):** Transit bus; shuttle Duty; EPA ULEV; CARB Low NOx (1.5) Warranty information: Chassis: 1-yr. / 24,000-**Fuel type:** Propane MSRP with alternative fuel: \$ 185,000 mi.; transmission: 2-yr. / 100,000-mi.; body: 5-yr. Engine make(s)/model(s): Cummins 5.9 LPG / 75,000-mi.; engine: 2-yr. / unlimited. Fuel capacity: 39 DGE Transmission make(s)/model(s): Allison Estimated driving range: 300 miles MT643 **GVW:** 28.000 lb. **Transmission type:** Automatic Seating capacity: 35 Emission certification(s): EPA Heavy-Duty; EPA **Model description:** Low-floor design, pressed Solo **Application(s):** Transit bus; shuttle; paratransit ULEV: CARB Low NOx (1.5) steel tanks, 3,600 psi Fuel type: CNG MSRP with alternative fuel: \$ 220.000 Warranty information: Chassis: 1-vr. / 24.000-**Engine make/model:** Cummins 5.9G 230 Fuel capacity: 70 DGE mi.; transmission: 2-yr. / 100,000-mi.; body: 5-yr. Transmission make(s)/model(s): Allison Estimated driving range: 300 miles / 75,000-mi.; engine: 2-yr. / unlimited. MT643 **GVW**: 31,000 lb. **Transmission type:** Automatic Seating capacity: 28 Emission certification(s): EPA ULEV; EPA **Model description:** Ford or Chevrolet cutaway Crusader **Application(s):** Transit bus; shuttle; paratransit Heavy-Duty; CARB Low NOx (1.5) **Fuel type:** Propane MSRP with alternative fuel: \$55,000 Warranty information: Chassis: 3-yr / 36,000-Engine make(s)/model(s): Ford LPG; GM LPG Fuel capacity: 20 DGE mi.; body: 5-yr. / 75,000-mi. Transmission make(s)/model(s): N/A Estimated driving range: 300 miles Transmission type: Automatic **GVW:** 10,700 lb. Seating capacity: 14

Challenger
Application(s): Transit bus; shuttle; paratransit MSRP with alternative fuel: \$ 60,000 Model description: Ford or Chevrolet cutaway Fuel capacity: 21 DGE chassis. **Fuel type:** Propane Warranty information: Chassis: 3-yr. / 36,000-**Estimated driving range:** 300 miles Engine make(s)/model(s): Ford LPG; GM LPG mi.; body: 5-yr. / 75,000-mi. **GVW**: 14,000 lb. Transmission make(s)/model(s): N/A Seating capacity: 25 **Transmission type:** Automatic Emission certification(s): EPA ULEV; EPA Heavy-Duty; CARB Low NOx (1.5) **Model description:** Type 2 steel hoop-wrapped ULEV; CARB Low NOx (1.5) Commodore **Application(s):** Shuttle; paratransit MSRP with alternative fuel: \$ 65,000 tanks: workhorse P30 rail chassis. Fuel type: CNG Fuel capacity: 32 DGE Warranty information: Chassis: 3-yr. / 36,000-**Engine make(s)/model(s):** GM 5.7 natural gas Estimated driving range: 300 miles mi.; body: 5-yr. / 75,000-mi. Transmission make(s)/model(s): N/A **GVW**: 14.100 lb. **Transmission type:** Automatic Seating capacity: 21 Emission certification(s): EPA Heavy-Duty; EPA Solo ULEV: CARB Low NOx (1.5) Model description: Low-floor design **Application(s):** Transit bus; paratransit MSRP with alternative fuel: \$ 220,000 Warranty information: Chassis: 1-vr. / 24.000-**Fuel type:** Propane Fuel capacity: 46 DGE mi.; transmission: 2-yr. / 100,000-mi.; body: 5-yr. Engine make(s)/model(s): Cummins 5.9 LPG Estimated driving range: 300 miles / 75,000-mi.; engine: 2-yr. / unlimited. **Transmission make(s)/model(s):** Allison GVW: 31,000 lb. MT643 Seating capacity: 28 **Transmission type:** Automatic Emission certification(s): EPA Heavy-Duty, EPA Duty; EPA ULEV; CARB Low NOx (1.5) **Model description:** Pressed steel tanks, 3,600 Contender **Application(s):** Transit bus; shuttle; paratransit MSRP with alternative fuel: \$ 185.000 Fuel type: CNG Fuel capacity: 60 DGE Warranty information: Chassis: 1-yr. / 24,000-**Engine make(s)/model(s):** Cummins 5.9 G Estimated driving range: 300 miles mi.; transmission: 2-yr. / 100,000-mi.; body: 5-yr. Transmission make(s)/model(s): Allison **GVW:** 28,000 lb. / 75,000-mi.; engine: 2-yr. / unlimited. MT643 Seating capacity: 35 **Transmission type:** Automatic **Emission certification(s):** EPA LEV; EPA Heavy-MSRP with alternative fuel: \$ 89,000 **Model description:** Pressed steel tanks, 3,600 **Application(s):** Transit bus; paratransit; shuttle Fuel capacity: 55 DGE Fuel type: CNG Estimated driving range: 300 miles Warranty information: Chassis: 3-yr. / 36,000-Engine make(s)/model(s): Cummins 5.9G 195 GVW: 19.000 lb. mi.; body: 5-yr. / 75,000-mi. Transmission make(s)/model(s): Allison Seating capacity: 37 AT545 **Transmission type:** Automatic Emission certification(s): EPA LEV; EPA Heavy-Duty; CARB Low NOx (1.5); EPA ULEV Phone: 888-391-1777 Chance Coach, Inc. Dealer locator Web site: N/A Web site: http://www.chancecoach.com Dealer locator phone: N/A Emission certification(s): EPA LEV; CARB Low **Model description:** Early 20th century AH-28 **Application(s):** Trolley NOx (2.5) American streetcar styling. **Fuel type:** Propane MSRP with alternative fuel: \$ 290,000 **Warranty information:** Complete coach: one

**Engine make(s)/model(s):** Cummins 5.9 LPG Transmission make(s)/model(s): Allison

MT643; Allison B300

**Transmission type:** Automatic

Fuel capacity: 49 DGE

Estimated driving range: 250 miles

**GVW**: 26.500 lb. Seating capacity: 28 year / 50,000 mi.; engine, transmission axles and air conditioning: two years.

**OPUS** Emission certification(s): EPA LEV; CARB Low **Model description:** The new OPUS low-floor **Application(s):** Transit bus NOx (2.0) Fuel type: CNG MSRP with alternative fuel: \$ 285,000 **Warranty information:** Complete coach: one Engine make(s)/model(s): Cummins 5.9G 230 Fuel capacity: 93 DGE vear/50.000 mi.; engine, transmission, axles, and Transmission make(s)/model(s): Allison Estimated driving range: 250 miles air conditioning: two years. B300 GVW: 33.500 lb. **Transmission type:** Automatic Seating capacity: 27 AH-28 Emission certification(s): EPA LEV; CARB Low **Model description:** Early 20th Century **Application(s):** Trolley American streetcar styling. Roof-mounted fuel Fuel type: CNG MSRP with alternative fuel: \$ 312,000 tanks. Engine make(s)/model(s): Cummins 5.9G 195 Fuel capacity: 64 DGE **Warranty information:** Complete coach: one Transmission make(s)/model(s): Allison Estimated driving range: 250 miles year/50,000 mi.; engine, transmission axles and MT643; Allison B300 GVW: 28.500 lb. air conditioning: two years. Transmission type: Automatic Seating capacity: 28 Crane Carrier Co. Phone: 918-836-1651 Dealer locator Web site: N/A Web site: http://www.cranecarrier.com Dealer locator phone: N/A **LCF** Emission certification(s): EPA ULEV; EPA LEV Model description: Low cab forward, tilt cab **Application(s):** Truck MSRP with alternative fuel: S N/A designed for refuse collection, heavy-duty, Left, Fuel type: LNG Fuel capacity: 74 DGE right, or dual steering. Front-mounted radiator Engine make(s)/model(s): Cummins C8.3G Estimated driving range: 200 miles (under cab). Single or tandem rear drive axles. **Plus 275 GVW:** 66,000 lb. Warranty information: N/A Transmission make(s)/model(s): Allison Seating capacity: 2 MD3560P **Transmission type:** Automatic LCF Emission certification(s): EPA ULEV: EPA LEV **Model description:** Low cab forward, tilt cab **Application(s):** Truck MSRP with alternative fuel: S N/A designed for refuse collection, heavy-duty. Left, Fuel type: CNG Fuel capacity: 49 DGE right, or dual steering. Front mounted radiator Engine make(s)/model(s): Cummins C8.3G Estimated driving range: 200 miles (under cab). Single or tandem rear drive axles. **Plus 275** Warranty information: N/A **GVW**: 65,000 lb. Transmission make(s)/model(s): Allison Seating capacity: 2 MD3560P **Transmission type:** Automatic Emission certification(s): EPA ULEV: EPA LEV **Model description:** Low entry (both sides) tilt I W/T **Application(s):** Truck MSRP with alternative fuel: \$ N/A cab designed for refuse collection. Heavy-duty **Fuel type:** LNG Fuel capacity: 74 DGE frame with weight-reducing aluminum **Engine make(s)/model(s):** Cummins C8.3G Estimated driving range: 200 miles components. Remote radiator above engine and Plus 275 **GVW:** 66,000 lb. behind cab. Single or tandem rear drive axles. Transmission make(s)/model(s): Allison Seating capacity: 2 Warranty information: N/A MD3560P **Transmission type:** Automatic I WT Emission certification(s): EPA LEV; EPA ULEV Model description: Low entry (both sides) tilt Application(s): Truck MSRP with alternative fuel: \$ N/A cab designed for refuse collection. Heavy-duty Fuel type: CNG Fuel capacity: 49 DGE frame with weight-reducing aluminum Engine make(s)/model(s): Cummins C8.3G Estimated driving range: 200 miles components. Remote radiator above engine and Plus 275 GVW: 66,000 lb. behind cab. Single or tandem rear drive axles. Transmission make(s)/model(s): Allison Seating capacity: 2 Warranty information: N/A MD3560P **Transmission type:** Automatic

LET2

**Application(s):** Truck **Fuel type:** LNG

Engine make(s)/model(s): Cummins C8.3G

**Plus 275** 

Transmission make(s)/model(s): Allison

MD3560P

**Transmission type:** Automatic

Emission certification(s): EPA ULEV; EPA LEV

MSRP with alternative fuel: \$ N/A

Fuel capacity: 74 DGE

**Estimated driving range:** 200 miles

GVW: 66,000 lb. Seating capacity: 4

Model description: Low entry (both sides) tilt cab designed for refuse collection, heavy-duty. Left, right, or dual steering. Remote mounted radiator, above engine and behind cab. Single or

tandem rear drive axles. **Warranty information:** N/A

#### **ElDorado National**

Web site: http://www.lasseter.com/eldorado.htm

Phone: 909-591-9557

Dealer locator Web site: N/A

Dealer locator phone: N/A

MST 2 Bus

**Application(s):** Transit bus; shuttle

Fuel type: Propane

Engine make/model: Cummins B5.9 LPG Transmission make(s)/model(s): Allison AT

545

**Transmission type:** Automatic

Emission certification(s): EPA LEV; EPA Heavy-

Duty; CARB Low NOx (2.0)

MSRP with alternative fuel: \$ N/A

Fuel capacity: N/A

Estimated driving range: N/A

GVW: 19,000 lb. Seating capacity: 31 **Model description:** Low-floor bus. **Warranty information:** N/A

MST 2 Bus

**Application(s):** Transit bus; shuttle

Fuel type: CNG

**Engine make(s)/model(s):** Cummins B5.9 G

**Transmission make(s)/model(s):** Allison AT

545

**Transmission type:** Automatic

Emission certification(s): EPA LEV; EPA Heavy-

Duty; CARB Low NOx (2.0); EPA ULEV **MSRP with alternative fuel:** \$ N/A

Fuel capacity: N/A

Estimated driving range: N/A

**GVW:** 19,000 lb. **Seating capacity:** 31

**Model description:** Low-floor bus. **Warranty information:** N/A

MST 28/30 Bus

**Application(s):** Transit bus; shuttle

**Fuel type:** Propane

Engine make(s)/model(s): Cummins B5.9 LPG

**Transmission make(s)/model(s):** Allison AT

545

**Transmission type:** Automatic

Emission certification(s): EPA LEV; CARB Low

NOx (2.0)

MSRP with alternative fuel: \$ 115,000

Fuel capacity: N/A

Estimated driving range: N/A

GVW: 19,000 lb.
Seating capacity: 31

**Model description:** Conventional-floor bus.

ADA-compliant.

Warranty information: N/A

MST 28/30 Bus

**Application(s):** Transit bus; shuttle

Fuel type: CNG

Engine make(s)/model(s): Cummins B5.9 G

Transmission make(s)/model(s): Allison AT

545

Transmission type: Automatic

Emission certification(s): EPA LEV; CARB Low

NOx (2.0); EPA Heavy-Duty; EPA ULEV **MSRP with alternative fuel:** \$ 115,000

**Fuel capacity:** N/A

Estimated driving range: N/A

**GVW:** 19,000 lb. **Seating capacity:** 31

Model description: Conventional-floor bus.

ADA-compliant.

Warranty information: N/A

EZ Rider2 30 Bus

**Application(s):** Transit bus; shuttle

Fuel type: CNG

**Engine make(s)/model(s):** Deere 6068H;

Deere 6081H

Transmission make(s)/model(s): Allison

Transmission type: Automatic

Emission certification(s): EPA LEV; CARB Low

NOx (2.0); EPA Heavy-Duty

MSRP with alternative fuel: \$ 245,000

Fuel capacity: N/A

Estimated driving range: N/A

GVW: 30,000 lb. Seating capacity: 29 **Model description:** Low-floor bus with CNG or

LNG capability. ADA-compliant. Altoona 12-year / 500,000-mile life cycle.

Warranty information: N/A

EZ Rider2 30 Bus **Application(s):** Transit bus; shuttle Emission certification(s): EPA LEV; CARB Low Model description: Low-floor bus with CNG or LNG capability. ADA-compliant. Altoona 12-NOx (2.0); EPA Heavy-Duty Fuel type: LNG MSRP with alternative fuel: \$ 245,000 year/500,000-mile life cycle. **Engine make(s)/model(s):** Cummins B5.9 G; Warranty information: N/A Fuel capacity: N/A **Cummins C8.3G** Estimated driving range: N/A Transmission make(s)/model(s): Allison GVW: 30,000 lb. **Transmission type:** Automatic Seating capacity: 29 Transmark 29/32 Bus **Application(s):** Transit bus; shuttle Emission certification(s): EPA LEV; CARB Low **Model description:** Conventional-floor bus. Altoona Bus Testing and Research Center data NOx (2.0); EPA Heavy-Duty Fuel type: Propane MSRP with alternative fuel: \$ 235,000 available. Engine make(s)/model(s):Cummins B5.9 LPG Fuel capacity: N/A Warranty information: N/A Transmission make(s)/model(s): Allison Estimated driving range: N/A GVW: 29.000 lb. **Transmission type:** Automatic **Seating capacity:** 34 Transmark 29/32 Bus **Emission certification(s):** EPA LEV; CARB Low **Model description:** Conventional-floor bus. Application(s): Transit bus; shuttle NOx (2.5); EPA Heavy-Duty; EPA ULEV Altoona Bus Testing and Research Center data Fuel type: CNG MSRP with alternative fuel: \$ 235,000 available. **Engine make(s)/model(s):** Cummins B5.9 G; Fuel capacity: N/A Warranty information: N/A **Cummins C8.3G** Estimated driving range: N/A Transmission make(s)/model(s): Allison GVW: 29.000 lb. B300 **Seating capacity:** 34 **Transmission type:** Automatic Phone: 847-741-5370 Elgin Sweeper Co. Dealer locator Web site: http://www.elginsweeper.com Web site: http://www.elginsweeper.com Dealer locator phone: 847-741-5370 Emission certification(s): EPA LEV; EPA ULEV **Model description:** Sterling SC 8000 cab-over Crosswind J Dual **Application(s):** Street sweeper MSRP with alternative fuel: S N/A chassis with common fuel system for truck and Fuel type: CNG Fuel capacity: 56 DGE sweeper with 52 diesel gallon equivalent. Sweeper **Engine make(s)/model(s):** Cummins B5.9G Estimated driving range: N/A is regeneration air type with an 8 cu. yd. rear Transmission make(s)/model(s): Allison 545 GVW: 33,000 lb. dumping hopper. **Transmission type:** Automatic Seating capacity: 2 Warranty information: Truck chassis: per chassis manufacturer; sweeper: one year parts and labor. Emission certification(s): EPA LEV; EPA ULEV Model description: Sterling SC 8000 cab-over Eagle F Dual CNG **Application(s):** Street sweeper MSRP with alternative fuel: \$ 205,475 chassis with common fuel system for truck and Fuel type: CNG Fuel capacity: 56 DGE sweeper with 52 diesel gallon equivalent. Street Engine make(s)/model(s): Cummins B5.9G Estimated driving range: N/A sweeper is mechanical broom type with 4.5 cu. Transmission make(s)/model(s): Allison 545 **GVW:** 33,000 lb. yd. debris hopper capable of dumping from **Transmission type:** Automatic ground level to 10 ft. high. Seating capacity: 2 Warranty information: Truck chassis: per chassis manufacturer; sweeper: one year parts and labor. Air Bear Dual Emission certification(s): EPA Heavy-Duty Model description: Single engine, recirculating, **Application(s):** Street sweeper MSRP with alternative fuel: \$ 181,915 air sweeper with 5.5 cu.yd. debris hopper capable **Fuel type:** Natural gas; diesel Fuel capacity: N/A of dumping from ground level to nine feet high. Engine make(s)/model(s): Caterpillar 3126DF Estimated driving range: N/A Freightliner FL70 chassis. Transmission make(s)/model(s): Allison GVW: 33,000 lb. **Warranty information:** Truck chassis: per 3560P Seating capacity: 2 chassis manufacturer; sweeper: one year parts and **Transmission type:** Automatic labor.

## Equipement Labrie

Web site: http://www.labrie.qc.ca

Phone: 418-831-8250

Dealer locator Web site: http://www.labrie.qc.ca

Dealer locator phone: 418-831-8250

**Automizer** Application(s): Truck Fuel type: CNG

Engine make(s)/model(s): Cummins C8.3G

280

Transmission make(s)/model(s): N/A

**Transmission type:** Automatic

Emission certification(s): CARB Low NOx

(2.5); EPA Heavy-Duty

MSRP with alternative fuel: \$ N/A

Fuel capacity: 54 DGE Estimated driving range: N/A

GVW: N/A

Seating capacity: N/A

**Model description:** Tandem-axle, side loading

trash compaction truck.

Warranty information: Same as comparable

diesel unit.

Expert 2000 **Application(s):** Truck

Fuel type: CNG

Engine make(s)/model(s): Cummins C8.3G

280

Transmission make(s)/model(s): N/A

Transmission type: Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 65 DGE Estimated driving range: N/A

GVW: N/A

Seating capacity: N/A

**Model description:** Single- or tandem-axle, side-loading trash collection truck.

Warranty information: Same as comparable

diesel unit.

Ford Motor Co.

Web site: http://www.fleet.ford.com

Phone: 877-258-3835

Dealer locator Web site: http://www.fleet.ford.com

Dealer locator phone: 877-258-3835

E-450 Cutaway **Application(s):** Shuttle

Fuel type: CNG

**Engine make(s)/model(s):** Ford natural gas

engines

Transmission make(s)/model(s): N/A

Transmission type: Automatic

**Emission certification(s):** EPA ULEV MSRP with alternative fuel: \$ N/A

Fuel capacity: 25 DGE

Estimated driving range: 290 miles

**GVW:** 14,050 lb. Seating capacity: N/A Model description: 176-inch wheelbase; in-

body tank kit available.

Warranty information: Standard new vehicle

limited warranty.

F-Series 350 450 550 Super Duty Bifuel Propane Application(s): Truck

**Fuel type:** Propane

**Engine make(s)/model(s):** Ford LPG Transmission make(s)/model(s): N/A

Transmission type: Automatic

**Emission certification(s):** EPA ULEV MSRP with alternative fuel: \$ N/A

Fuel capacity: 18 DGE Estimated driving range: N/A

GVW: 19.000 lb. Seating capacity: N/A **Model description:** Offered in chassis cab, regular cab, or crew cab in 4x2 or 4x4. Three tank configurations available. Standard 28-gallon aft-of-axle propane tank.

Warranty information: Standard new vehicle limited warranty (identical to gasoline-powered version), including three-year / 36,000-mile (60,000 km in Canada) bumper-to-bumper

coverage.

Freightliner Custom Chassis

Web site: http://www.freightlinerchassis.com

Phone: 864-487-1700

Dealer locator Web site: N/A Dealer locator phone: N/A

MB-45

**Application(s):** Transit bus; trolley, shuttle

Fuel type: CNG

**Engine make(s)/model(s):** Cummins 5.9G Transmission make(s)/model(s): N/A

**Transmission type:** N/A

Emission certification(s): EPA LEV; EPA ULEV MSRP with alternative fuel: \$ 47,000

Fuel capacity: 42 DGE

Estimated driving range: 300 miles

GVW: 26,000 lb. Seating capacity: N/A **Model description:** The CNG system offers a no-

start safety feature.

Warranty information: Engine: 2-vr. / unlimited; fuel system: 2-yr./24,000 mi.

Model description: The CNG system offers a no Emission certification(s): EPA LEV; EPA ULEV MB-55 **Application(s):** Transit bus; trolley; shuttle MSRP with alternative fuel: \$ 47.000 start safety feature. Fuel type: CNG Fuel capacity: 42 DGE Warranty information: Engine: 2-vr. / Engine make(s)/model(s): Cummins 5.9G Estimated driving range: 300 miles unlimited: fuel system: 2-vr. / 24.000 mi. Transmission make(s)/model(s): N/A GVW: 26,000 lb. Transmission type: N/A Seating capacity: N/A MB-45 Emission certification(s): N/A **Model description:** Rail chassis. **Application(s):** Transit bus; trolley, shuttle MSRP with alternative fuel: \$ 47,000 **Warranty information:** Engine: 2-yr. / **Fuel type:** Propane unlimited; fuel system: 2-yr. / 24,000 mi. Fuel capacity: N/A Engine make(s)/model(s):Cummins 5.9 LPG Estimated driving range: 300 miles Transmission make(s)/model(s): N/A GVW: 26,000 lb. Transmission type: N/A Seating capacity: N/A Emission certification(s): N/A **Model description:** Rail chassis. MB-55 **Application(s):** Transit bus; trolley, shuttle MSRP with alternative fuel: \$ 47,000 **Warranty information:** Engine: Two-yr. / Fuel type: Propane Fuel capacity: N/A unlimited; fuel system: 2-yr. / 24,000 mi. **Engine make(s)/model(s):** Cummins 5.9 LPG Estimated driving range: 300 miles Transmission make(s)/model(s): N/A GVW: 26,000 lb. Transmission type: N/A Seating capacity: N/A Freightliner Trucks Phone: 1-800-385-4357 Dealer locator Web site: N/A Web site: http://www.freightliner.com Dealer locator phone: N/A **Business Class FL70** Emission certification(s): EPA LEV; EPA Heavy-Model description: N/A Century Class
Application(s): Truck; utility; refuse Duty; EPA ULEV; CARB Low NOx Warranty information: Basic: Two-yr. / MSRP with alternative fuel: \$ N/A unlimited mileage. Warranty may change **Fuel type:** Propane Fuel capacity: N/A according to the application of the vehicle. Engine make(s)/model(s):Cummins 5.9 LPG Estimated driving range: N/A Transmission make(s)/model(s): Allison GVW: N/A Seating capacity: 6 **Transmission type:** Automatic; manual **Business Class FL70** Emission certification(s): EPA LEV; EPA Heavy-Model description: N/A Century Class **Application(s):** Truck; utility, refuse Warranty information: Basic: Two-yr. / Duty; EPA ULEV; CARB Low NOx MSRP with alternative fuel: \$ N/A unlimited mileage. Warranty may change Fuel type: CNG Fuel capacity: 20 DGE according to the application of the vehicle **Engine make(s)/model(s):** Caterpillar 3126B; Estimated driving range: N/A Caterpillar C12DF; Cummins 8.3G; Cummins GVW: N/A 5.9G: Mercedes-Benz MBE 900-CNG Seating capacity: 6 Transmission make(s)/model(s): Allison Fuller Transmission type: Automatic; manual Emission certification(s): EPA LEV; EPA Heavy-Model description: N/A **Business Class FL70** Century Class

Application(s): Truck; utility; refuse Duty; EPA ULEV; CARB Low NOx Warranty information: Basic: Two-yr. / MSRP with alternative fuel: \$ N/A unlimited mileage. Warranty may change Fuel type: LNG Fuel capacity: 20 DGE according to the application of the vehicle **Engine make(s)/model(s):** Caterpillar 3126B; Estimated driving range: N/A Caterpillar C12DF; Cummins 8.3G; Cummins 5.9G; GVW: N/A Mercedes-Benz MBE 900-CNG Seating capacity: 6 Transmission make(s)/model(s): Allison Transmission type: Automatic; manual 22

## Kalmar Industries Corp.

Web site: http://www.magnumterminaltractor.com

Phone: 903-759-5490 Dealer locator Web site: N/A Dealer locator phone: N/A

Magnum TT100LPG **Application(s):** Terminal tractor

Fuel type: CNG

Engine make(s)/model(s): Cummins 5.9G Transmission make(s)/model(s): Allison MT-

643

**Transmission type:** Automatic

**Emission certification(s):** N/A MSRP with alternative fuel: S N/A

Fuel capacity: 62 DGE Estimated driving range: N/A

GVW: 15,000 lb. Seating capacity: 1 Model description: N/A Warranty information: N/A

Magnum TT100LNG

**Application(s):** Terminal tractor

Fuel type: LNG

Engine make(s)/model(s): Cummins 5.9G Transmission make(s)/model(s): Allison MT-

**Transmission type:** Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 62 DGE

Estimated driving range: N/A

GVW: 15,000 lb. Seating capacity: 1 Model description: N/A Warranty information: N/A

Mack Trucks, Inc.

Web site: http://www.macktrucks.com

Phone: 610-709-3259

Dealer locator Web site: http://www.macktrucks.com

Dealer locator phone: N/A

MR

**Application(s):** Truck; refuse; concrete pumping; fuel oil delivery; block truck

Fuel type: CNG

Engine make(s)/model(s): Mack Eco-Tech E7G

Transmission make(s)/model(s): Allison

HD4560

Transmission type: Automatic

**Emission certification(s):** CARB Low

NOx (2.5)

MSRP with alternative fuel: \$ 187,497

Fuel capacity: 93 DGE

Estimated driving range: N/A

**GVW:** 80,000 lb. Seating capacity: 2 **Model description:** CNG and LNG fuel systems

are factory installed options.

**Warranty information:** Engine: Three-yr. / 300,000 mi.; major components: five-yr. / 500,000 mi. Custom warranties available with the

best standard warranties in the industry.

MR

**Application(s):** Truck; refuse; concrete pumping; fuel oil delivery; block truck

Fuel type: LNG

**Engine make(s)/model(s):** Mack Eco-Tech

E7G 325

Transmission make(s)/model(s): Allison

HD4560

**Transmission type:** Automatic

Emission certification(s): CARB Low

NOx (2.5)

MSRP with alternative fuel: \$ 187,497

Fuel capacity: 93 DGE Estimated driving range: N/A

GVW: 80.000 lb. Seating capacity: 2 Model description: CNG and LNG fuel systems are factory installed options.

Warranty information: Engine: Three-yr. / 300,000 mi.; major components: five-yr. / 500,000 mi. Custom warranties available with the

best standard warranties in the industry.

LE

**Application(s):** Truck Fuel type: CNG

Engine make(s)/model(s): Mack Eco-Tech

E7G 325

Transmission make(s)/model(s): Allison

HD4560

**Transmission type:** Automatic

Emission certification(s): CARB Low

NOx (2.5)

MSRP with alternative fuel: \$ 225,543

Fuel capacity: 93 DGE Estimated driving range: N/A

GVW: 80,000 lb. Seating capacity: 2

**Model description:** Dual steer refuse chassis. Available options include front, side, and rear load refuse bodies. The LE chassis is also available with a drop frame for manual side loading. CNG and LNG fuel systems are factory installed options.

**Warranty information:** Engine: Three-yr. / 300,000 mi.; major components: five-yr. / 500,000 mi. Custom warranties available with the best standard warranties in the industry.

Application(s): Truck Fuel type: LNG

Engine make(s)/model(s):Mack Eco-Tech E7G

325

Transmission make(s)/model(s): Allison

HD4560

**Transmission type:** Automatic

**Emission certification(s):** CARB Low NOx

(2.5)

MSRP with alternative fuel: \$ 225.543

Fuel capacity: 93 DGE Estimated driving range: N/A

**GVW:** 80,000 lb. Seating capacity: 2 **Model description:** Dual steer refuse chassis. Available options include front, side, and rear load refuse bodies. The LE chassis is also available with a drop frame for manual side loading. CNG and LNG fuel systems are factory installed options.

**Warranty information:** Engine: Three-yr. / 300.000 mi.: major components: five-vr. / 500,000 mi. Custom warranties available with the best standard warranties in the industry.

**MotivePower** 

Web site: http://www.wabtec.com

MP1200G

**Application(s):** Railroad switching locomotive

**Fuel type:** LNG

Engine make(s)/model(s): Caterpillar G3516

Transmission make(s)/model(s): Kato 8P6.5-

3000

Transmission type: N/A

Phone: 800-272-7702

Dealer locator Web site: http://www.wabtec.com

Dealer locator phone: 800-272-7702

Emission certification(s): N/A

MSRP with alternative fuel: \$ 1,450,000

Fuel capacity: 868 DGE

Estimated driving range: N/A

GVW: 260,000 lb. Seating capacity: 3 **Model description:** Four-axle switching locomotive with advanced microprocessor electrical and traction control systems. Locomotive has three interconnected LNG tanks

for a total of 1,400 gallons.

Warranty information: Two-yr. / 200,000 mi.,

whichever occurs first, on parts and

workmanship.

Motor Coach Industries

Web site: http://www.mcicoach.com

D4000 CNG

**Application(s):** Commuter bus

Fuel type: CNG

**Engine make(s)/model(s):** Detroit Diesel

Series 60G 330

Transmission make(s)/model(s): Allison

**Transmission type:** Automatic

Phone: 800-743-3624

Dealer locator Web site: www.mcicoach.com/newsalesrep.html

Dealer locator phone: 800-743-3624

**Emission certification(s):** CARB Low NOx (2.5)

MSRP with alternative fuel: \$ 498.157

Fuel capacity: 114 DGE

Estimated driving range: 300 miles

**GVW**: 46,000 lb. Seating capacity: 47 **Model description:** 40-ft. high-floor commuter coach includes a baggage bay, parcel racks, wheel chair lift, reclining seats with head rests and arm rests, and airline style overhead, A/C vents and reading lights.

Warranty information: 2-yr.

Neoplan USA Corp.

Web site: http://www.neoplanusa.com

AN 340/345 Metroliner **Application(s):** Transit bus; suburban commuter

Fuel type: CNG

Engine make(s)/model(s): Detroit Diesel

Series 60G

Transmission make(s)/model(s): Allison World

**Transmission type:** Automatic

Dealer locator phone: N/A Emission certification(s): EPA LEV; EPA Heavy-

Phone: 719-336-3256

Dealer locator Web site: N/A

MSRP with alternative fuel: S N/A

Fuel capacity: N/A

Estimated driving range: 300 miles

GVW: N/A

**Seating capacity:** 57

Model description: ADA compliant. Accessible restroom optional. Suburban or transit interior.

Warranty information: N/A

AN 460 Articulated

Low Floor

**Application(s):** Transit bus; commuter

Fuel type: CNG

**Engine make(s)/model(s):** Detroit Diesel

Series 60G

Transmission make(s)/model(s): Allison

World

**Transmission type:** Automatic

**Emission certification(s):** EPA LEV MSRP with alternative fuel: S N/A

Fuel capacity: N/A

Estimated driving range: 250 miles

GVW: N/A

Seating capacity: 65

Model description: ADA compliant equipment available. Suburban or transit interior.

Warranty information: N/A

AN 440 Transliner Application(s): Transit bus; airport shuttle Fuel type: CNG Engine make(s)/model(s): Detroit Diesel Series 50G; Cummins C8.3G Transmission make(s)/model(s): Allison World; ZF Transmission type: Automatic	Emission certification(s): EPA LEV; EPA Heavy-Duty MSRP with alternative fuel: \$ N/A Fuel capacity: N/A Estimated driving range: 300 miles GVW: N/A Seating capacity: 43	Model description: Composite tanks, arrangement optional. Warranty information: N/A
AN 440 Transliner Application(s): Transit bus; airport shuttle Fuel type: LNG Engine make(s)/model(s): Detroit Diesel Series 50G; Cummins C8.3G Transmission make(s)/model(s): Allison World; ZF Transmission type: Automatic	Emission certification(s): EPA LEV; EPA Heavy- Duty MSRP with alternative fuel: \$ N/A Fuel capacity: N/A Estimated driving range: 300 miles GVW: N/A Seating capacity: 43	Model description: Composite tanks, arrangement optional. Warranty information: N/A
AN 440 LF Transliner Low Floor Application(s): Transit bus; airport shuttle Fuel type: CNG Engine make(s)/model(s): Detroit Diesel Series 50G; Cummins C8.3G Transmission make(s)/model(s): Allison World; ZF Transmission type: Automatic	Emission certification(s): EPA LEV; EPA Heavy- Duty MSRP with alternative fuel: \$ N/A Fuel capacity: N/A Estimated driving range: 300 miles GVW: N/A Seating capacity: 40	Model description: Low-floor with ramp. Composite tanks, arrangement optional. Warranty information: N/A
AN 440 LF Transliner Low Floor Application(s): Transit bus; airport shuttle Fuel type: LNG Engine make(s)/model(s): Detroit Diesel Series 50G; Cummins C8.3G Transmission make(s)/model(s): Allison World; ZF Transmission type: Automatic	Emission certification(s): EPA LEV; EPA Heavy- Duty MSRP with alternative fuel: \$ N/A Fuel capacity: N/A Estimated driving range: 300 miles GVW: N/A Seating capacity: 40	Model description: Low-floor with ramp. Composite tanks, arrangement optional. Warranty information: N/A
New Flyer of America Web site: http://www.newflyer.com	Phone: 204-224-1251 Dealer locator Web si Dealer locator phone	ite: N/A
C30LF Transit Coach Application(s): Transit bus Fuel type: CNG Engine make(s)/model(s): Detroit Diesel Series 50G; Cummins C8.3G Transmission make(s)/model(s): Allison 8300R; Allison 8400R Transmission type: Automatic	Emission certification(s): N/A MSRP with alternative fuel: \$ N/A Fuel capacity: 130 DGE Estimated driving range: 350 miles GVW: 40,600 lb. Seating capacity: 40	Model description: 30-foot low-floor transit bus. Warranty information: 1-yr. / 50,000 mi.
C35LF Transit Coach Application(s): Transit bus	Emission certification(s): N/A MSRP with alternative fuel: \$ N/A	Model description: 35-foot, low-floor transit bus.

C40LF Transit Coach

**Application(s):** Transit bus

Fuel type: CNG

Engine make(s)/model(s): Detroit Diesel

Series 50G; Cummins C8.3G

Transmission make(s)/model(s): Allison

8300R; Allison 8400R

**Transmission type:** Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 130 DGE

Estimated driving range: 350 miles

**GVW:** 46,000 lb. **Seating capacity:** 40

**Model description:** 40-foot low-floor transit

bus.

**Warranty information:** 1 yr. / 50,000 mi.

L40LF Transit Bus

**Application(s):** Transit bus **Fuel type:** LNG

Engine make(s)/model(s): Detroit Diesel

Series 50G; Cummins C8.3G

Transmission make(s)/model(s): Allison

8300R; Allison 8400R

**Transmission type:** Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 130 DGE

Estimated driving range: 350 miles

GVW: 40,600 lb. Seating capacity: 40 **Model description:** 40-foot low-floor transit

bus.

Warranty information: 1 yr. / 50,000 mi.

North American Bus Industries

Web site: http://www.nabiusa.com

Dealer locator Web site: N/A
Dealer locator phone: N/A

Phone: 805-529-5080

60LFW

**Application(s):** Transit bus

Fuel type: CNG

**Engine make(s)/model(s):** Detroit Diesel

Series 50G; Cummins C8.3G

**Transmission make(s)/model(s):**Allison; ZF

**Transmission type:** Automatic

**Emission certification(s):** EPA Heavy-Duty **MSRP with alternative fuel:** S 470.000

Fuel capacity: N/A

Estimated driving range: 350 miles

GVW: 66,600 lb. Seating capacity: 60 **Model description:** Optional features include all stainless steel body structure; wheelchair ramp in rear door.

**Warranty information:** Specified by customer; typically one year or 50,000 mi. for entire bus.

60LFW

**Application(s):** Transit bus

Fuel type: LNG

**Engine make(s)/model(s):** Detroit Diesel

Series 50G; Cummins C8.3G

Transmission make(s)/model(s):Allison; ZF

**Transmission type:** Automatic

Emission certification(s): EPA Heavy-Duty
MSRP with alternative fuel: \$ 470,000

Fuel capacity: N/A

Estimated driving range: 350 miles

GVW: 66,600 lb.
Seating capacity: 60

**Model description:** Optional features include all stainless steel body structure; wheelchair ramp in rear door.

**Warranty information:** Specified by customer; typically one year or 50,000 mi. for entire bus.

40 LFW or 35 LFW **Application(s):** Transit bus

Fuel type: CNG

**Engine make(s)/model(s):** Detroit Diesel

Series 50G; Cummins C8.3G

Transmission make(s)/model(s): Allison; ZF

Transmission type: Automatic

**Emission certification(s):** EPA Heavy-Duty **MSRP with alternative fuel:** \$ 330,000

Fuel capacity: 151 DGE

Estimated driving range: 400 miles

GVW: 40,600 lb Seating capacity: 40 **Model description:** Optional features include all stainless steel body structure; wheelchair ramp in rear door.

**Warranty information:** Specified by customer; typically one year or 50,000 mi. for entire bus.

40 LFW or 35 LFW **Application(s):** Transit bus

Fuel type: LNG

Engine make(s)/model(s): Detroit Diesel

Series 50G: Cummins C8.3G

Transmission make(s)/model(s): Allison; ZF

**Transmission type:** Automatic

**Emission certification(s):** EPA Heavy-Duty **MSRP with alternative fuel:** \$ 330,000

Fuel capacity: 127 DGE

**Estimated driving range:** 400 miles

GVW: 40,600 lb. Seating capacity: 40 **Model description:** Optional features include all stainless steel body structure; wheelchair ramp in rear door.

**Warranty information:** Specified by customer; typically one year or 50,000 mi. for entire bus.

Nova Bus Inc. Phone: 505-347-2011 Dealer locator Web site: N/A Web site: http://www.novabuses.com Dealer locator phone: N/A Emission certification(s): EPA ULEV; EPA Model description: Natural gas powered RTS is RTS Transit Bus **Application(s):** Transit bus Heavy-Duty available in 35- and 40-foot lengths, 102 inches Fuel type: CNG MSRP with alternative fuel: \$ N/A wide. LNG and CNG fuel tank arrangements are Engine make(s)/model(s): Detroit Diesel Fuel capacity: 158 DGE optional. Full range of seating options and interior S50G: Cummins C8.3G Estimated driving range: 400 miles trim levels are available. Fully compliant with ADA Transmission make(s)/model(s): ZF GVW: 39.500 lb. using front or exit door wheelchair lifts. **Transmission type:** Automatic **Warranty information:** Standard industry Seating capacity: 45 warranties are available. RTS Transit Bus Emission certification(s): EPA ULEV; EPA Model description: Natural gas powered RTS is **Application(s):** Transit bus **Heavy-Duty** available in 35- and 40-foot lengths, 102 inches Fuel type: LNG MSRP with alternative fuel: \$ N/A wide. LNG and CNG fuel tank arrangements are **Engine make(s)/model(s):** Detroit Diesel Fuel capacity: 158 DGE optional. Full range of seating options and S50G: Cummins C8.3G Estimated driving range: 400 miles interior trim levels are available. Fully compliant Transmission make(s)/model(s): ZF GVW: 39,500 lb. with ADA using front or exit door wheelchair lifts. Transmission type: Automatic Seating capacity: 45 **Warranty information:** Standard industry warranties are available. **Omnitrans** Phone: 405-840-2622 Dealer locator Web site: N/A Web site: http://www.cngvehicle.com Dealer locator phone: N/A Emission certification(s): EPA ULEV: EPA Model description: N/A GM/Isuzu/Workhorse chassis Heavy-Duty; CARB Low NOx (1.5) Warranty information: 3-yr. / 50,000-mi. **Application(s):** Truck; transit bus; school bus; MSRP with alternative fuel: \$ N/A trolley; shuttle Fuel capacity: N/A **Fuel type:** Propane Estimated driving range: N/A Engine make(s)/model(s): GM 5.7: GM 6.0: GVW: N/A **GM 8.1 LPG** Seating capacity: N/A Transmission make(s)/model(s): N/A **Transmission type:** Automatic; manual Emission certification(s): EPA ULEV; EPA Model description: N/A GM/Isuzu/Workhorse Heavy-Duty; CARB Low NOx (1.5) Warranty information: 3-yr. / 50,000-mi. chassis **Application(s):** Truck; transit bus; school bus; MSRP with alternative fuel: \$ N/A trollev: shuttle Fuel capacity: N/A Fuel type: LNG Estimated driving range: N/A Engine make(s)/model(s): GM 5.7; GM 6.0; GVW: N/A **GM 8.1 LNG** Seating capacity: N/A Transmission make(s)/model(s): N/A **Transmission type:** Automatic; manual GM/Isuzu/Workhorse Model description: N/A Emission certification(s): EPA ULEV; EPA

chassis

**Application(s):** Truck; transit bus; school bus;

trolley: shuttle Fuel type: CNG

Engine make(s)/model(s): GM 5.7; GM 6.0;

GM 8.1 CNG

Transmission make(s)/model(s): N/A **Transmission type:** Automatic; manual

Heavy-Duty; CARB Low NOx (1.5) MSRP with alternative fuel: \$ N/A

Fuel capacity: N/A

Estimated driving range: N/A

GVW: N/A

Seating capacity: N/A

Warranty information: 3-yr. / 50,000-mi.

Phone: 905-403-1111 Orion Bus Industries Dealer locator Web site: N/A Web site: N/A Dealer locator phone: N/A **Emission certification(s):** EPA Heavy-Duty **Model description:** Low-floor transit bus. Orion VII CNG **Application(s):** Transit bus MSRP with alternative fuel: \$ N/A Warranty information: N/A Fuel type: CNG Fuel capacity: N/A **Engine make(s)/model(s):** Detroit Diesel Estimated driving range: 350 miles Series 50G; Cummins C8.3G; John Deere 6081H **GVW**: 41.000 lb. **Transmission make(s)/model(s):** Allison: ZF: Seating capacity: 44 Voith **Transmission type:** Automatic Peterbilt Phone: 940-591-4000 Dealer locator Web site: http://www.peterbilt.com Web site: http://www.peterbilt.com Dealer locator phone: 940-591-4000 Emission certification(s): N/A Model description: N/A 320 Application(s): Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. Fuel type: CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF GVW: 80.000 lb. **Transmission make(s)/model(s):** Fuller; **Seating capacity:** 3 Allison Transmission type: Automatic; manual 320 Emission certification(s): N/A Model description: N/A Application(s): Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** LNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF **GVW:** 80,000 lb. **Transmission make(s)/model(s):** Fuller; **Seating capacity:** 3 Allison **Transmission type:** Automatic; manual Emission certification(s): N/A **Model description:** N/A 357 **Application(s):** Truck MSRP with alternative fuel: \$ N/A Warranty information: Contact Peterbilt dealer. Fuel type: CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF **GVW:** 80,000 lb. **Transmission make(s)/model(s):** Fuller: **Seating capacity:** 3 Allison **Transmission type:** Automatic; manual

357

**Application(s):** Truck **Fuel type:** LNG; diesel

**Engine make(s)/model(s):** Caterpillar 3126DF;

Caterpillar C10DF; Caterpillar C12DF Transmission make(s)/model(s): Fuller;

Allison

Transmission type: Automatic; manual

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 81 DGE

Estimated driving range: 300 miles

**GVW**: 80,000 lb. **Seating capacity:** 3

Model description: N/A

Warranty information: Contact Peterbilt dealer.

Emission certification(s): N/A **Model description:** N/A 378 Application(s): Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF: Caterpillar C12DF **GVW**: 80,000 lb. **Transmission make(s)/model(s):** Fuller; Seating capacity: 3 Allison **Transmission type:** Automatic; manual Emission certification(s): N/A **Model description:** N/A 378 **Application(s):** Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** LNG: diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF GVW: 80.000 lb. **Transmission make(s)/model(s):** Fuller: **Seating capacity:** 3 Allison **Transmission type:** Automatic; manual Emission certification(s): N/A Model description: N/A 379 **Application(s):** Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; **Estimated driving range:** 300 miles Caterpillar C10DF; Caterpillar C12DF GVW: 80,000 lb. **Transmission make(s)/model(s):** Fuller; **Seating capacity:** 3 Allison Transmission type: Automatic; manual 379 Emission certification(s): N/A **Model description:** N/A Application(s): Truck MSRP with alternative fuel: S N/A Warranty information: Contact Peterbilt dealer. Fuel type: LNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF **GVW:** 80.000 lb. **Transmission make(s)/model(s):** Fuller; **Seating capacity:** 3 Allison Transmission type: Automatic; manual 385 **Emission certification(s):** N/A **Model description:** N/A **Application(s):** Truck MSRP with alternative fuel: \$ N/A Warranty information: Contact Peterbilt dealer. Fuel type: CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF **GVW**: 80.000 lb. **Transmission make(s)/model(s):** Fuller: Seating capacity: 3 Allison **Transmission type:** Automatic; manual 29

385 Emission certification(s): N/A Model description: N/A Application(s): Truck MSRP with alternative fuel: \$ N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** LNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; **Estimated driving range:** 300 miles Caterpillar C10DF; Caterpillar C12DF GVW: 80.000 lb. **Transmission make(s)/model(s):** Fuller: Seating capacity: 3 Allison Transmission type: Automatic; manual Emission certification(s): N/A Model description: N/A 330 Application(s): Truck MSRP with alternative fuel: \$ N/A Warranty information: Contact Peterbilt dealer. **Fuel type:** CNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF: Caterpillar C12DF **GVW**: 80,000 lb. **Transmission make(s)/model(s):** Fuller; Seating capacity: 3 Allison **Transmission type:** Automatic; manual 330 **Model description:** N/A Emission certification(s): N/A **Application(s):** Truck MSRP with alternative fuel: \$ N/A Warranty information: Contact Peterbilt dealer. Fuel type: LNG; diesel Fuel capacity: 81 DGE **Engine make(s)/model(s):** Caterpillar 3126DF; Estimated driving range: 300 miles Caterpillar C10DF; Caterpillar C12DF GVW: 80.000 lb. **Transmission make(s)/model(s):** Fuller; Seating capacity: 3 Allison **Transmission type:** Automatic; manual Spartan Motors Chassis Phone: 517-543-6400 Dealer locator Web site: N/A Web site: http://www.spartanmotors.com Dealer locator phone: N/A **Emission certification(s):** EPA LEV; EPA ULEV; Model description: N/A TB **Application(s):** Trolley, shuttle; specialty **EPA Heavy-Duty** Warranty informatin: 12 months/24,000 mi. **Fuel type:** Propane MSRP with alternative fuel: S N/A **Engine make(s)/model(s):** Cummins 5.9 LPG Fuel capacity: N/A Transmission make(s)/model(s): Allison Estimated driving range: N/A **B300: Allison B400 GVW:** 36,000 lb. **Transmission type:** Automatic Seating capacity: N/A Emission certification(s): EPA LEV; EPA ULEV; **Model description:** N/A **Application(s):** Trolley, shuttle; specialty **EPA Heavy-Duty** Warranty informaton: 12 months/24,000 mi. Fuel type: CNG MSRP with alternative fuel: \$ N/A **Engine make(s)/model(s):** Cummins B5.9G; Fuel capacity: N/A **Cummins C8.3G** 

Transmission make(s)/model(s): Allison

B300; Allison B400

**Transmission type:** Automatic

Estimated driving range: N/A

**GVW:** 36,000 lb. Seating capacity: N/A

Emission certification(s): EPA LEV; EPA ULEV; Model description: N/A **Application(s):** Trolley, shuttle; specialty Warranty information: 12 months/24,000 mi. **EPA Heavy-Duty** Fuel type: LNG MSRP with alternative fuel: \$ N/A **Engine make(s)/model(s):** Cummins B5.9G; Fuel capacity: N/A **Cummins C8.3G** Estimated driving range: N/A Transmission make(s)/model(s): Allison **GVW:** 36,000 lb. B300: Allison B400 Seating capacity: N/A **Transmission type:** Automatic Emission certification(s): EPA LEV; EPA ULEV; I F **Model description:** N/A **Application(s):** Trolley, shuttle; specialty **EPA Heavy-Duty** Warranty information: 12 months/24,000 mi. **Fuel type:** Propane MSRP with alternative fuel: \$ N/A **Engine make/model:** Cummins 5.9 LPG Fuel capacity: N/A Transmission make(s)/model(s): Allison Estimated driving range: N/A B300: Allison B400 **GVW:** 36,000 lb. **Transmission type:** Automatic Seating capacity: N/A I F **Emission certification(s):** EPA LEV; EPA ULEV; Model description: N/A **Application(s):** Trolley, shuttle; specialty **EPA Heavy-Duty** Warranty information: 12 months/24,000 mi. Fuel type: CNG MSRP with alternative fuel: \$ N/A **Engine make(s)/model(s):** Cummins B5.9G; Fuel capacity: N/A **Cummins C8.3G** Estimated driving range: N/A Transmission make(s)/model(s): Allison **GVW:** 36,000 lb. B300; Allison B400 Seating capacity: N/A **Transmission type:** Automatic LF **Emission certification(s):** EPA LEV; EPA ULEV; **Model description:** N/A **Application(s):** Trolley, shuttle; specialty **EPA Heavy-Duty** Warranty information: 12 months/24,000 mi. Fuel type: LNG MSRP with alternative fuel: \$ N/A **Engine make(s)/model(s):** Cummins B5.9G; Fuel capacity: N/A **Cummins C8.3G** Estimated driving range: N/A Transmission make(s)/model(s): Allison **GVW:** 36,000 B300: Allison B400 Seating capacity: N/A **Transmission type:** Automatic Phone: 800-784-8725 Supreme/Specialty Dealer locator Web site: N/A Web site: www.colorschemer.com/online/www.specialtyvehicles.com Dealer locator phone: N/A Emission certification(s): EPA LEV **Model description:** Underfloor tanks. Classic R.E Application(s): Trolley MSRP with alternative fuel: \$ 270.000 Warranty information: 3-yr./150,000-mi. **Fuel type:** CNG with diesel Fuel capacity: N/A **Engine make(s)/model(s):** Caterpillar 3126DF Estimated driving range: 225 miles Transmission make(s)/model(s): Allison GVW: 31,000 lb. B300 Seating capacity: 32 **Transmission type:** Automatic Classic R.E Emission certification(s): EPA LEV **Model description:** Underfloor tanks. **Application(s):** Trolley MSRP with alternative fuel: \$ 270,000 Warranty information: 3-yr./150,000-mi. **Fuel type:** Propane Fuel capacity: N/A Engine make(s)/model(s): Cummins 5.9 LPG Estimated driving range: 225 miles 195 **GVW:** 31.000 lb. **Transmission make/model:** Allison B300 Seating capacity: 32 **Transmission type:** Automatic 31

## Thomas Built Buses

Web site: www.colorschemer.com/online/www.thomasbus.com

Phone: 336-889-4871

Dealer locator Web site: http://www.thomasbus.com

Dealer locator phone: N/A

Saf-T-Liner **Application(s):** School bus

Fuel type: CNG

**Engine make(s)/model(s):** Cummins B5.9G;

John Deere 6068H

Transmission make(s)/model(s): Allison MD

3060

Transmission type: Automatic

Emission certification(s): EPA LEV MSRP with alternative fuel: \$ 100,000

Fuel capacity: 118 DGE Estimated driving range: N/A

GVW: 36,200 lb. Seating capacity: 84

**Model description:** Composite tanks.

Warranty information: N/A

Tymco

Web site: http://www.colorschemer.com/online/www.tymco.com

Phone: 254-799-5546

Dealer locator Web site: N/A

Dealer locator phone: 254-799-2722

600

**Application(s):** Street sweeper

Fuel type: CNG

Engine make(s)/model(s): GM 5.7 natural gas Transmission make(s)/model(s): Allison

AT545

**Transmission type:** Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: 48 DGE

Estimated driving range: N/A

GVW: 33,000 lb. Seating capacity: 2 **Model description:** Four 16-inch diameter by 61-inch length composite wrapped steel cylinders located behind cab of truck

Warranty information: Standard manufacturer

warranty.

Volvo Trucks North America

Web site: www.colorschemer.com/online/www.volvotrucks.com

Dealer locator Web site: N/A Dealer locator phone: N/A

Phone: 336-393-2000

Application(s): True

Application(s): Truck; refuse

Fuel type: CNG

Engine make(s)/model(s): Cummins C8.3G Transmission make(s)/model(s): Allison

Transmission type: Automatic

Emission certification(s): N/A MSRP with alternative fuel: \$ N/A

Fuel capacity: N/A

Estimated driving range: 250 miles

**GVW:** 66,000 lb. **Seating capacity:** 2

**Model description:** Several configurations for

refuse market.

Warranty information: N/A

WX

**Application(s):** Truck; refuse

Fuel type: LNG

Engine make(s)/model(s): Cummins C8.3G Transmission make(s)/model(s): Allison

**Transmission type:** Automatic

**Emission certification(s):** N/A **MSRP with alternative fuel:** \$ N/A

Fuel capacity: N/A

Estimated driving range: 250 miles

**GVW:** 66,000 lb. **Seating capacity:** 2

**Model description:** Several configurations for

refuse market.

Warranty information: N/A

## Hybrid-Electric, Battery-Electric & Fuel Cell Heavy Vehicles

Advanced Vehicle Systems Inc.

Web site: http://www.avsbus.com

Dealer locator Web site: N/A Dealer locator phone: N/A

Phone: 423-821-3146

AVS-30/AVS-35 **Application(s):** Transit bus **Drivetrain type:** Series hybrid

APU fuel type: Diesel; natural gas; propane

**Battery type:** Lead acid Battery voltage: 288 volts Battery capacity: N/A Battery weight: N/A

Traction motor peak power: 60 kW Traction motor continuous power: 75 kW

**APU peak power:** 56 kW APU continuous power: 56 kW

Motor mounting configuration: N/A Regenerative braking? Yes Type of charger: N/A Charge time: 8 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 55 mph

GVW: 33,700 lb. Seating capacity: 31 **Driving range: 250 miles**  Available chassis: N/A Engine make(s)/model(s): N/A **Vehicle description:** N/A Warranty information: N/A

AVS-40

**Application(s):** Transit bus **Drivetrain type:** Series hybrid

**APU fuel type:** Diesel; natural gas; propane

**Battery type:** Lead acid Battery voltage: 288 volts Battery capacity: N/A Battery weight: N/A

Traction motor peak power: 60 kW **Traction motor continuous power:** 75 kW

**APU peak power:** 56 kW **APU continuous power:** 56 kW **Motor mounting configuration:** N/A **Regenerative braking?** Yes

Type of charger: N/A Charge time: 8 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 55 mph

GVW: 33,700 lb. Seating capacity: 41 **Driving range: 250 miles**  Available chassis: N/A

Engine make(s)/model(s): N/A Vehicle description: N/A Warranty information: N/A

AVS-22 Pure Electric

**Application(s):** Transit bus **Drivetrain type:** Pure electric

**APU fuel type:** N/A Battery type: Lead acid Battery voltage: 288 volts **Battery capacity:** 58 kWh Battery weight: 6,000 lb.

**Traction motor peak power:** 78 kW Traction motor continuous power: 34 kW

APU peak power: N/A **APU continuous power:** N/A Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: 8 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 45 mph

GVW: 25,000 lb. Seating capacity: 22 **Driving range:** 65 miles

Available chassis: AVS design Engine make(s)/model(s): N/A **Vehicle description:** N/A Warranty information: N/A

AVS-22 Hybrid

**Application(s):** Transit bus Drivetrain type: Series hybrid

APU fuel type: Natural gas; diesel; propane

Battery type: Lead acid Battery voltage: 288 volts **Battery capacity:** 58 kWh Battery weight: 4,000 lb.

Traction motor peak power: 78 kW Traction motor continuous power: 34 kW

APU peak power: 28.8 kW **APU continuous power:** 16 kW Motor mounting configuration: N/A

**Regenerative braking?** Yes Type of charger: N/A Charge time: 8 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 45 mph

GVW: 25,000 lb. Seating capacity: 22

**Driving range:** 250 miles

**Available chassis:** AVS design

**Engine make(s)/model(s):** Capstone

Microturbine

Vehicle description: N/A **Warranty information:** N/A

## Capstone Turbine Corp.

Web site: http://www.microturbine.com

Model 330/Capstone 60 (power plant only)

**Application(s):** Truck; transit bus; school bus;

trolley; shuttle

**Drivetrain type:** Series hybrid

**APU fuel type:** Diesel; natural gas; propane **Battery type:** Lead acid; lithium ion; nickel

cadmium; nickel-metal-hydride; other

Battery voltage: N/A Battery capacity: N/A Battery weight: N/A

Traction motor peak power: N/A
Traction motor continuous power: N/A

APU peak power: 60 kW APU continuous power: 60 kW Motor mounting configuration: N/A

Regenerative braking? N/A Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A

Phone: 818-734-5300 Dealer locator Web site: N/A

Dealer locator phone: N/A

Vehicle max. continuous speed: N/A

GVW: N/A

Seating capacity: N/A Driving range: N/A

Available chassis: N/A

Engine make(s)/model(s): N/A

**Vehicle description:** Capstone supplies auxiliary power units (APUs) for production vehicle

platforms.

Warranty information: Typical warranty for the

APU is 12 months.

## Electric Vehicles International

Web site: http://www.evi-usa.com

Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: 7 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 50 mph

GVW: 18,700 lb. Seating capacity: 22 Driving range: 150 miles

Dealer locator Web site: N/A
Dealer locator phone: N/A

Phone: 765-643-3722

Available chassis: N/A
Engine make(s)/model(s): N/A
Vehicle description: Low-floor, vintage-style

trolley with advanced, quiet electric propulsion designed for nearly maintenance-free operation.

Warranty information: One year, full system

including batteries.

## Electric Trolley **Application(s):** Trolley

**Drivetrain type:** Pure electric; series hybrid

**APU fuel type:** Propane

Battery type: Lead acid Battery voltage: 320 volts Battery capacity: 70 kWh Battery weight: 5,200 lb.

Traction motor peak power: 84 kW Traction motor continuous power: 30 kW

APU peak power: 12.5 kW APU continuous power: 10 kW

#### 2001 Electric Tram

**Application(s):** Tram

**Drivetrain type:** Pure electric; series hybrid

APU fuel type: Propane Battery type: Lead acid Battery voltage: 324 volts Battery capacity: 70 kWh Battery weight: 3,530 lb.

Traction motor peak power: 56 kW Traction motor continuous power: 19 kW

APU peak power: 12.5 kW APU continuous power: 10 kW Motor mounting configuration: N/A

**Regenerative braking?** Yes **Type of charger:** Conductive

**Charge time:** 7 hrs. **Discharge rate:** N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 35 mph

GVW: 10,000 lb. Seating capacity: 64 Driving range: 120 miles Available chassis: N/A

Engine make(s)/model(s): N/A

**Vehicle description:** Designed for low-speed applications for up to 64 seated passengers. **Warranty information:** One year, full system

including batteries.

#### 2001 Electric Bus

**Application(s):** Shuttle

**Drivetrain type:** Pure electric; series hybrid

APU fuel type: Propane Battery type: Lead acid Battery voltage: 320 volts Battery capacity: 70 kWh Battery weight: 5,200 lb.

Traction motor peak power: 84 kW Traction motor continuous power: 30 kW

APU peak power: 12.5 kW APU continuous power: 10 kW Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: Conductive Charge time: 7 hrs.

Discharge rate: N/A Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 50 mph

GVW: 18,700 lb. Seating capacity: 22 Driving range: 150 miles Available chassis: N/A

Engine make(s)/model(s): N/A

**Vehicle description:** Flux vector controller, AC motor and regenerative braking features standard. 10-kW generator option increases daily range to

150 miles.

**Warranty information:** One year, full system including batteries

including batteries.

#### ISE Research - ThunderVolt

Web site: http://www.iseresearch.com

Phone: 619-287-8785 Dealer locator Web site: N/A Dealer locator phone: N/A

T801H

**Application(s):** Truck; transit bus; shuttle;

ground service equipment **Drivetrain type:** Series hybrid

**APU fuel type:** Gasoline; diesel; natural gas;

propane; fuel cell

Battery type: Lead acid; lithium ion; nickel-

metal-hydride

**Battery voltage:** 576 volts **Battery capacity:** 50 kWh **Battery weight:** N/A

Traction motor peak power: 250 kW Traction motor continuous power: 170 kW

APU peak power: 220 kW APU continuous power: 220 kW Motor mounting configuration: N/A

**Regenerative braking?** Yes **Type of charger:** Conductive

Charge time: 6 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 55,000 lb. Seating capacity: N/A Driving range: 300 miles Available chassis: Peterbilt; Kenworth;

Freightliner; Volvo; Ford

Engine make(s)/model(s): N/A

Vehicle description: Class 8, 33,000-55,000 lb.

chassis

Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

T803H

**Application(s):** Truck; transit bus; shuttle;

ground service. equipment **Drivetrain type:** Series hybrid

**APU fuel type:** Gasoline; diesel; natural gas;

propane

Battery type: Lead acid; lithium ion; nickel-

metal-hydride

**Battery voltage:** 576 volts **Battery capacity:** 50 kWh **Battery weight:** N/A

Traction motor peak power: 265 kW Traction motor continuous power: 190 kW

**APU peak power:** 280 kW **APU continuous power:** 200 kW

Motor mounting configuration: N/A

**Regenerative braking?** Yes **Type of charger:** Conductive

Charge time: 6 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 80,000 lb. Seating capacity: N/A Driving range: 300 miles **Available chassis:** Peterbilt: Kenworth:

Freightliner; Volvo; Ford

Engine make(s)/model(s): N/A

**Vehicle description:** Class 8 to 80,000 lb. **Warranty information:** Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

TV701HT

**Application(s):** Truck; transit bus; shuttle;

ground service equipment **Drivetrain type:** Series hybrid

**APU fuel type:** Gasoline; diesel; natural gas;

propane; fuel cell

**Battery type:** Lead acid; lithium ion; nickel-

metal-hydride

Battery voltage: 576 volts Battery capacity: 50 kWh Battery weight: N/A

Traction motor peak power: 250 kW Traction motor continuous power: 170 kW

APU peak power: 200 kW APU continuous power: 200 kW Motor mounting configuration: N/A

**Regenerative braking?** Yes **Type of charger:** Conductive

**Charge time:** 6 hrs. **Discharge rate:** N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 32,990 lb. Seating capacity: N/A Driving range: 300 miles Available chassis: Ford; GM; Peterbilt;

Kenworth; Freightliner; Volvo

**Engine make(s)/model(s):** Ford; John Deere;

Cummins; Caterpillar; GM; Capstone

**Vehicle description:** N/A

Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

701AT

**Application(s):** Truck; transit bus; shuttle;

ground service equipment

**Drivetrain type:** Pure electric; series hybrid **APU fuel type:** Gasoline; diesel; natural gas;

propane; fuel cell

Battery type: Lead acid; lithium ion; nickel-

metal-hydride

Battery voltage: 576 volts Battery capacity: 50 kWh Battery weight: N/A

Traction motor peak power: 140 kW Traction motor continuous power: 100 kW

APU peak power: N/A APU continuous power: N/A Motor mounting configuration: N/A

**Regenerative braking?** Yes **Type of charger:** Conductive

**Charge time:** 6 hrs. **Discharge rate:** N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 60,000 lb. Seating capacity: 2 Driving range: N/A Available chassis: Stewart & Stevenson; TUG;

**Ford** 

Engine make(s)/model(s): N/A

**Vehicle description:** Push park tractor for

aircraft up to 400,000 lb.

Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

TB3OHT

**Application(s):** Truck; transit bus; shuttle;

ground service equipment **Drivetrain type:** Series hybrid

**APU fuel type:** Diesel; gasoline; natural gas; fuel

cell; propane

Battery type: Lead acid; lithium ion; nickel-

metal-hydride

Battery voltage: 576 volts Battery capacity: 50 kWh Battery weight: N/A

Traction motor peak power: 120 kW Traction motor continuous power: 85 kW

APU peak power: 60 kW APU continuous power: 30 kW Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: Conductive Charge time: 6 hrs.

Discharge rate: N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 30,000 lb. Seating capacity: 28 Driving range: 180 miles **Available chassis:** ElDorado National **Engine make(s)/model(s):** Capstone

Microturbine

**Vehicle description:** N/A

Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

**TB30H** 

**Application(s):** Truck; transit bus; shuttle;

ground service equipment **Drivetrain type:** Series hybrid

APU fuel type: Gasoline; diesel; natural gas;

propane; fuel cell

Battery type: Nickel-metal-hydride; lead acid;

lithium ion

Battery voltage: 576 volts Battery capacity: 50 kWh Battery weight: N/A

Traction motor peak power: 120 kW Traction motor continuous power: 85 kW

APU peak power: 120 kW APU continuous power: 120 kW Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: Conductive Charge time: 6 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 30,000 lb. Seating capacity: 33 Driving range: 220 miles Available chassis: ElDorado National

**Engine make(s)/model(s):** Cummins; Ford;

GM; John Deere

Vehicle description: N/A

Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

**TB40H** 

**Application(s):** Truck; transit bus; shuttle;

ground service equipment **Drivetrain type:** Series hybrid

**APU fuel type:** Gasoline; natural gas; propane;

diesel; fuel cell

Battery type: Lead acid; lithium ion; nickel-

metal-hydride

Battery voltage: 576 volts Battery capacity: 50 kWh Battery weight: N/A

Traction motor peak power: 220 kW Traction motor continuous power: 170 kW

APU peak power: 220 kW APU continuous power: 200 kW Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: Conductive Charge time: 6 hrs.

Discharge rate: N/A

Lifetime mileage of storage batteries:

100,000 miles

Vehicle max. continuous speed: N/A

GVW: 45,000 lb. Seating capacity: 60 Driving range: 300 miles Available chassis: New Flyer; Gillig; NABI; NOVA Engine make(s)/model(s): Cummins; Caterpillar; John Deere; Ford; Capstone Vehicle description: 40-ft. low-floor bus. Warranty information: Standard 1-yr. bumper-

to-bumper, other warranties negotiable.

## New Flyer of America

Web site: http://www.newflyer.com

Phone: 204-224-1251 Dealer locator Web site: N/A Dealer locator phone: N/A

#### DE40 LF Transit Bus

**Application(s):** Transit bus **Drivetrain type:** Parallel hybrid

APU fuel type: Diesel Battery type: N/A Battery voltage: N/A Battery capacity: N/A Battery weight: N/A

Traction motor peak power: N/A
Traction motor continuous power: N/A

APU peak power: N/A APU continuous power: N/A Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: N/A

GVW: 40,600 lb. Seating capacity: 40 Driving range: N/A Available chassis: N/A

Engine make(s)/model(s): N/A

Vehicle description: Low-floor transit bus with

diesel/electric drivetrain.

Warranty information: One year/50,000 miles

#### **H40LF Transit Bus**

**Application(s):** Transit bus **Drivetrain type:** Parallel hybrid

APU fuel type: fuel cell Battery type: N/A Battery voltage: N/A Battery capacity: N/A Battery weight: N/A

Traction motor peak power: N/A
Traction motor continuous power: N/A

APU peak power: N/A APU continuous power: N/A **Motor mounting configuration:** N/A

Regenerative braking? Yes Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: N/A

GVW: 40,600 lb. Seating capacity: 40 Driving range: N/A Available chassis: N/A

Engine make(s)/model(s): N/A

**Vehicle description:** Transit bus powered by

hydrogen-fed fuel cell. **Warranty information:** N/A

### Orion Bus Industries

Web site: N/A

Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 62 mph

GVW: 41,000 lb. Seating capacity: 44 Driving range: 350 miles

Phone: 905-403-1111 Dealer locator Web site: N/A Dealer locator phone: N/A

Phone: 978-658-2231

Dealer locator Web site: N/A

Available chassis: N/A

Engine make(s)/model(s): Cummins ISB Vehicle description: Low-floor transit bus with advanced hybrid diesel-electric propulsion.

Warranty information: N/A

# Orion VII Hybrid Application(s): Transit bus Private in type: Series hybrid

Drivetrain type: Series hybrid APU fuel type: Diesel Battery type: Lead acid Battery voltage: 550 volts Battery capacity: N/A

Battery weight: N/A
Traction motor peak power: N/A

Traction motor continuous power: 179 kW

APU peak power: N/A

APU continuous power: 120 kW

# Solectria Web site: http://www.solectria.com

**.** 

CitiVan
Application(s): Truck
Drivetrain type: Series hybrid
APU fuel type: Diesel; natural gas
Battery type: Lead act

Battery voltage: 336 volts Battery capacity: 15 kWh Battery weight: 1,400 lb.

Traction motor peak power: 120 kW Traction motor continuous power: 60 kW

**APU peak power:** 30 kW **APU continuous power:** 30 kW

Dealer locator phone: N/A

Motor mounting configuration: N/A

Ava

Regenerative braking? Yes Type of charger: N/A Charge time: 7.5 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 50 mph

GVW: 12,000 lb. Seating capacity: 2 Driving range: 150 miles Available chassis: N/A

Engine make(s)/model(s): N/A

**Vehicle description:** Powered by Capstone

microturbine.

Warranty information: N/A

CitiVan

**Application(s):** Truck **Drivetrain type:** Pure electric

APU fuel type: N/A
Battery type: Lead acid
Battery voltage: 312 volts
Battery capacity: 30 kWh

Battery weight: 2,500 lb. Traction motor peak power: 120 kW

Traction motor continuous power: 50 kW

APU peak power: N/A APU continuous power: N/A Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: 9 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 60 mph

GVW: 12,000 lb. Seating capacity: 2 Driving range: 40 miles Available chassis: N/A

Engine make(s)/model(s): N/A Vehicle description: N/A Warranty information: N/A

Blue Bird Hybrid Bus

**Application(s):** School bus **Drivetrain type:** Series hybrid **APU fuel type:** Diesel; natural gas

Battery type: Lead acid Battery voltage: 336 volts Battery capacity: 34 kWh Battery weight: 3,500 lb.

Traction motor peak power: 250 kW Traction motor continuous power: 115 kW

APU peak power: 70 kW APU continuous power: 40 kW Motor mounting configuration:

Tandem/direct

Regenerative braking? Yes Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 55 mph

GVW: 33,000 lb. Seating capacity: 66 Driving range: N/A Available chassis: N/A

Engine make(s)/model(s): N/A Vehicle description: N/A Warranty information: N/A

Blue Bird Electric Bus

**Application(s):** School bus **Drivetrain type:** Pure electric

APU fuel type: N/A Battery type: Lead acid Battery voltage: 336 volts Battery capacity: 67 kWh Battery weight: 7,000 lb.

Traction motor peak power: 250 kW Traction motor continuous power: 115 kW

APU peak power: N/A APU continuous power: N/A Motor mounting configuration: N/A

Regenerative braking? Yes Type of charger: N/A Charge time: 9 hrs. Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 55 mph

GVW: 33,000 lb. Seating capacity: 66 Driving range: 60 miles Available chassis: N/A

Engine make(s)/model(s): N/A Vehicle description: N/A Warranty information: N/A

TransTeq

Web site: http://www.transteq.com

Phone: 303-382-1041
Dealer locator Web site: N/A
Dealer locator phone: N/A

EcoMark

Application(s): Shuttle
Drivetrain type: Series hybrid
APU fuel type: Natural gas
Battery type: Lead acid
Battery voltage: 340 volts
Battery capacity: 26 kWh
Battery weight: 1,350 lb.

Traction motor peak power: 328 kW Traction motor continuous power: 328 kW

APU peak power: 67 kW APU continuous power: 52 kW **Motor mounting configuration:** Front corner

of bus

Regenerative braking? Yes Type of charger: N/A Charge time: N/A Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 30 mph

GVW: 24,400 lb. Seating capacity: 98 Driving range: N/A Available chassis: N/A

Engine make(s)/model(s): Ford 2.5 liter Vehicle description: 45-ft. complete low-floor bus. Stainless tube frame with plastic body. Independent rear suspension with electric motor drive each rear wheel. Engine mounted in front of bus, opposite driver.

Warranty information: N/A

## XCELLSIS Inc.

#### Web site: http://www.xcellsis.com

Phone: 604-432-9200 Dealer locator Web site: N/A Dealer locator phone: N/A

Series HY-205-4 Transit Model Application(s): Transit bus Drivetrain type: N/A APU fuel type: Fuel cell Battery type: N/A Battery voltage: N/A Battery weight: N/A

Traction motor peak power: N/A

Traction motor continuous power: 205 kW

APU peak power: N/A APU continuous power: N/A **Motor mounting configuration:** N/A **Regenerative braking?** Yes

Type of charger: N/A
Charge time: N/A
Discharge rate: N/A

Lifetime mileage of storage batteries: N/A Vehicle max. continuous speed: 50 mph

GVW: N/A

Seating capacity: 40 Driving range: 180 miles Available chassis: New Flyer H40LF Engine make(s)/model(s): N/A Vehicle description: PEM fuel cell stack provides power. Peak torque of 1,100 Nm @ 800

rpm.

**Warranty information:** N/A

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